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Music as a Human Need

A Plea for Free National Instruction in Music.

BY

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Submitted in Partial Fulfilment of the Requirements
For the Degree of Doctor of Philosophy
in the
Faculty of Political Science
Columbia University.

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1914

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This work is gratefully dedicated to my husband,
Mr. A. Judson Powell

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PREFACE

It will be observed that in the following pages political and economic events are presented in their aspect of emotion-producing forces in social pressure, with but scant attention to their other values. An artificially selective process must also be acknowledged in that, of those events only such as seem to have produced a direct emotional reaction upon a people have been considered. Those long continued economic movements which produced no sudden changes have not been taken into account, because what may be termed their disturbing effects were too gradual to allow of their being included among specific emotion-making forces*; slow changes are not sensed by whole peoples. Uneducated masses, especially, do not become conscious of progressive movements until their effects are so apparent as to require consideration by reason of aroused emotional reaction. The history of a slow transition, therefore, may be for the scientific purposes of this investigation unimportant as compared with the somewhat dislocated perturbance, which resulted at the

*Long labor movements which are conceded to be slow emotion-making forces are not included.

moment when the events under consideration were happening, and calling forth a reaction definitely emotional. Moreover, at such a precise moment, the events may have been raised to social consciousness, not as they appear to us in the clear afterlight of scientific attitude and historical accuracy, but as popular concepts of the moment, having power to arouse intense national emotional reaction; similar recent popular waves of feeling, due not to facts as they are, but to popular conceptions of such facts, will readily occur to each reader.

With this warning that not the dignity of history, but the intensity of public emotionalism is within the purview and area of our investigation, we may proceed to a statement of the method and of the general thesis.

The method to be pursued, is to examine contemporaneous and concurrent public events and emotion products, as expressed in Music.

The results indicated may be given a preliminary statement as follows:

1. Agitation is a cause of pulse disturbance.
2. Sufficient agitation produces fatal disturbance of bodily rhythm.
3. All strong emotions are disturbers of rhythmic motion throughout the body.
4. Rhythmic motion, too often disturbed, leads to abnormal mental and physical conditions.

5. Civilization constantly "disturbs" the bodily rhythm.
6. The political and industrial troubles of a nation are signs of national "disturbance" of rhythm.
7. Music, closely expressing the emotional life of each period, is the unconscious application of a remedy to a human need of rhythmic stimulus.

These points are part of the general thesis, which may be stated in the following terms: MUSIC IS A HUMAN NEED, INCREASING AND DECREASING WITH SOCIAL PRESSURE.

The tendency of a group in each stage of human development, is to produce Music fitting the character of the social disturbances of its time, and communities which most fully meet this need of rhythm by national culture of Music, tend to preserve for longer periods, the serenity of the public mind. Thus it will be seen that national control and support of Music may be assumed to be a national duty. This control and support will aid in the preservation of a healthy state of the public mind. Such a condition will make more effective all other efforts for the abolition of discontent, disease, vice and criminality.

National culture and support of Music are effective means of exercising social control, because of

the calming influence of Music upon disturbed thought. Such an influence is a most necessary one at the present stage of mental agitation. Established within disturbed zones, national institutions for free musical instruction would place a check upon strained intellectualism, with its brood of idea-monstrosities, since Music would cause a relaxation of mental concentration. It is a matter of experience, that relaxation of tension generally accompanies the yielding of the excited mind to musical rhythm.

Furthermore, there are other and not inconsiderable arguments for the national support of Music. On account of the great expense of a musical education, much promising American talent is now deprived of cultivation. To all persons evidencing marked musical ability, and showing themselves worthy of aid, this rich country should give national support.

American national instruction in Music is also a duty to American industry because such instruction would open the employment field in Music to American wage earners. Some idea of the amount of private business along this line may be gained from the following:

MUSIC IN THE WEST.*

If music seems a needless luxury to some, what will they

*The *Literary Digest*, January 10, 1914.

think of the cold economic fact of Chicago spending $30,000,000 in one year for musical instruments of all kinds, sheet music, music-books, musical supplies, and music lessons? This figure is "based on reliable information," says Mr. D. A. Clippinger, in *The Musician* (Boston), and he intimates that this yearly expenditure of one Western city is only typical of what the great expanse of our country beyond the Appalachians is doing. It will be observed that this sum does not include what is spent to hear music, but to gain instruction in it.

At present America is obliged to depend both for her best Music and musical instruction largely upon foreign talent. With national support of her own talent, this deplorable condition would soon cease. This would also free Americans from absolute dependence upon private institutions.

Music has also become an important industry, employing a vast number of agents. It is high time that this employment were placed within reach of American labor. Such an end can be attained only by furnishing adequate training for this skilled work. At present foreigners are the agents for the satisfaction of this need for rhythm in orchestras, bands, hotels, restaurants, church choirs, studios, clubs, steamships, operas and at social functions. An important wage earning occupation is thus out of reach of our own talent.

It may be argued that considerable expense is already incurred by municipalities and states, for training in musical appreciation in the form of concerts, public school instruction, park bands, etc.

These expenses are admittedly very large and yet what is their productive value along the line of musical instruction? What is the real value, for instance, of the many thousands of dollars annually expended upon public Music in a city like New York? The educated listener finds the programs faulty, falling far short of a true expression of a composer's idea, while to the uneducated hearer, it is principally a diversion of his attention, without teaching him anything. The establishment of musical departments in colleges will never be able to meet this crying need. The majority of the institutions which depend even in part upon tuition-fees received from their pupils, reach the least needy of our people, and sometimes the least talented. Where the industrial shoe pinches the hardest, there is where the national social or political danger lies, and there is where the need is greatest. Where the social pressure is most felt, there is formed a mine of musical diamonds. Neither the city nor the state can so control musical development, as to produce a national type in musical composition. Music is a universal need, passionately craved by the nation's children. Hence our federal government should attend to this demand, which is becoming more and more insistent every day, indicative of a national want. We venture the not idle prophecy, that the whole American nation would cheerfully

bear a tax, for so good a work as the establishment of national free schools of Music all over our land. That European countries have recognized this need is shown by the statistics which will be found below.* These statistics were very difficult to procure, and are rather surprising in content.

A copy of the questionnaire sent out will be found in Appendix A. The nations from whom we expected the least expenditure for musical culture, were found to be the most lavish. The United States stands apart from the world's array of musical patrons. The recent interest in Indian and Negro Music may, however, prove an entering wedge to a wider cultivation of our national musical resources. Our State universities and our public schools are institutions of which the nation is justly proud. Why not open your arms a little wider, generous America, and take into your embrace your own fair musical child, now so weak and puny, but full of promise for the future? The hope of the writer is, that this cry will be heard by the nation's head.

With such national support in view, we have gathered our statistics. City ventures are not con-

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*Appendix E.

sidered; park bands, military bands,* new buildings for national musical academies, in short, all outlays for Music not tending to contribute directly toward the musical education of the people under consideration, are omitted. Thus the large contributions of cities for public entertainments are left out of our calculation entirely. The United States has not fallen into line with European countries in national culture of Music, but probably this is simply because the attention of our nation has not hitherto been called to Music as a health measure. Too much ink has flowed in describing Music as a diversion, as an amusement, as an ideal, as a superfluous luxury, whereas no greater physical and mental need exists, than the unconscious physical need of rhythm, the conscious physical need of Music.

The world, it is true, may not at once accept the theory of "rhythm" herein set forth. An investigation of it, however, would bring about some new and interesting discoveries, in regard to unsuspected effects of Music upon the nervous system. In any case, Music is a wonder worker which should now occupy the attention of sociologists, psychologists, and physicians.

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*Reference is to hired bands, not made up of musicians trained for the purpose by the Federal Government. Such training, as in England, constitutes an important form of vocational training.

Music has been generally regarded as the language of the emotions, but it has never been determined why these emotions, having art, poetry, the dance, and many other means of partial expression, so insistently require sound for complete self-realization. The beat of the pulse and the measure in Music are similar rhythmic expressions, but the close relation of one to the other has heretofore been ignored. Yet groups have a pulse; history has a pulse; the phenomena of the physical universe have a pulse; all life manifestations are demonstrations of pulse action.

What becomes of the countless millions of musical sound vibrations sent into space by the orchestral performances in a great city? Are they all impotent, reaching only to the auditory organs, and dying there? Or do they actually enter the human system and set to their own perfect rhythm, all of the discordant motions therein encountered? Do they not "act as stimuli on the sensitive psychoplasm and effect changes in its molecular composition?"*

All rhythm, however divided, is perfect motion. Rhythm, acting upon a disturbed motion, tends to impose its own motion upon the discord, if stronger than the disturbance encountered. This theory not only imputes a higher mission to Music than has heretofore been realized, but also accounts for phe-

*Riddle of the Universe, by Ernst Haekel, p. 110.

nomena of organized sound vibrations, and for the craving of all human life for Music. This passionate desire for Music is an established fact, and it remains but to show the need of this inspiring sound stimulus, in order to place Music in the list of recognized national necessities.

The willing response of Austria, Bavaria, Belgium, Denmark, England, Equador, France, Holland, Hungary, Italy, Norway, Russia, Saxony, Sweden and the United States to the author's request for musical statistics merits special mention. Prussia alone of the nations applied to for statistics appeared either unwilling, or unable to furnish the same regarding her national support of Music. The author shared the general opinion that Prussia led the world in this field. But although requested through proper official channels, from several influential quarters, no response was obtained. A cable from the United States Consul in Berlin says that the musical "statistics are unavailable." The letter from the Minister of Saxony may give some insight into the real condition of German musical support, and as such it is added in Appendix E.*

The Appeal in this work is for a system of public musical instruction upon the principles governing our public school management. This would be a step in

*The highly prized originals of the foreign ministerial letters are preserved and in the writer's possession.

advance of the systems of governmental support of musical institutions, as represented in the statistics included in this work, which systems generally place a small charge upon those pupils who are able to pay. All of these institutions admit to full privileges free of any charge, the exceptionally talented among the poor. The object of each such institution as we advocate, should be the support, by the government, of native musical talent, without regard to profit or loss in the management. Music is one of those sciences which do not attract the untalented to their study, and, this being the case, little loss of instruction is involved. The proper study of Music includes so many of the regular public school studies, and so much of the elements of higher education, as Psychology, Biology, Sociology, Physics, Economics, Social Legislation, History, Languages, Literature, Physical Training, Self-Control, to say nothing of the mathematical studies included in such branches as orchestration, harmony, counterpoint, etc., that a model musical college would furnish an education and culture, far more beneficial to individuals and the group, than is offered by some of the present systems of education. The immediate cost would be immense, but the author is convinced that this outlay would bring quick returns, in decreasing costs for the protection of the native individual, from many of the effects of nerve derangement in children and

in adults, in lessening discontent, riots, antagonism between labor and capital, and many manifestations of partial insanity. In short, such a system is a prime factor in social control, to the lack of which may be ascribed in some measure the present peril to civilization.

We take this opportunity to express our indebtedness for the statistics furnished in each case to the following gentlemen, who, either in their official or in a private capacity, replied to the questionnaire submitted, and whose co-operation has been invaluable in our attempt to present the most recent conditions of State-aided Music abroad: Wilhelm Bopp, Director of the Imperial and Royal Academy of Music and Fine Arts, Vienna, Austria; M. Steiner, Minister of the Interior for Religion and Schools, Bavaria; M. Phillis, Minister of Arts and Sciences, Belgium; J. Clan, Danish Consul-General in New York, and Cornelius Rübner, head of the Music Department of Columbia University; Olmedo Alfaro, son of the President of Equador, and the Directors of the Conservatory of Quito, Equador; A. W. Twenlyman, of the English Education Board, London, England; I. Philipp of the Paris Conservatory; Th. Heemskerk, Minister of the Interior, Holland; Luigi Credaro, Minister of Public Instruction, Rome, Italy; Ole Olesen, Military Inspector of Music, Norway; Wm. Thackara, American Consul-General, Berlin, Germany; Alexandre Lyssakovsky,

First Secretary of the Russian Embassy, Washington, D. C.; (Graf) Vitzhum von Eckstaedt, Minister of the Interior, Saxony; Bror Beckman, of the Royal Conservatory of Music, Stockholm, Sweden; L. A. Kalbach, Chief Clerk of the United States Bureau of Education, Washington, D. C.; Mr. Wm. H. Taft, ex-President of the United States; Naray-Szabo, Secretary of State, Hungary, and Dr. Paul Majewsky, Chief of the Fine Art Section of the Royal Hungarian Ministry of Public Worship and Education, Budapest.

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Our sincere thanks are due, in the gathering of these statistics to Commendatore Eugenio di Pirani, President of the American Philharmonic Academy.

PART I.

THE THESIS.

CHAPTER I.

Music as a Human Need.

Our thesis contemplates a new phase in psychological and sociological study, one wherein we must endeavor to estimate the part played in mental and environmental development, by vibration as the acting force.

In whatever direction we turn, Music is met with in one form or another. The undoubted fact that Music is not confined to the human species, but is a part of bird and other animal life, is strongly indicative that there is something more in Music, than its apparent pleasurable quality, and that beneath its array of superficial forms, there must lie some great fundamental necessity for its existence and functioning. Upon it may depend the preservation of the life of certain complex living organisms.

Darwin's theory as expressed in "The Descent of Man"[1] seems to us not to touch the real source of the phenomenon, and in Spencer's "Illustrations of

Universal Progress," the latter's theory of the Origin and Function of Music[2] seems to us to omit the greatest factor in Music. Spencer's idea is that all Music is an idealization of the natural language of passion, but the nature of passion does not in reality lend itself to Music, because passion's spontaneity of action forever forbids the exercise of that control which is needed in the performance of Music. Wallaschek, in "Primitive Music,"[3] claims that Music is the result of the original rhythmical impulse in man. This last mentioned theory approaches more nearly the theory advanced by us in the present work, namely, that Music originates in man's *need* of rhythmical sound-vibrations, for the re-establishment of rhythmical motion in his own nervous system, disturbed by the evolutionary increase of mental action not rhythmically employed.[4] In order to view the subject fully, and in all its implications, we must retrace the path of evolution to that point, where

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[1] Part II, p. 375: "The true song however of most birds and various strange cries are chiefly uttered during the breeding season, and serve as a charm, or merely as a call-note to the other sex."

[2] Vol. II, Chap. 19.

[3] Chapter 9.

[4] If, as Haekel says in "The Riddle of the Universe," p. 116, "When the mimosa roots are shaken by the tread of a passer-by, the stimulus is immediately conveyed to all the cells of the plant," may not the far stronger stimulus of musical sound be similarly transmitted to the human cells not directly concerned in hearing?

the living thing which later developed into the man of today, first found itself in possession of locomotion agencies and prehensile appendages, and first began to move about in search of energy materials, with which to satisfy an inward need of integration. The first thing that moved began to dissipate its motion, and to "need" corresponding integration. Rhythm marked this primitive inward action, undisturbed by ideas; rhythm also governed the external stimulus. This prehistoric atavus ate when hungry, or when he could get food, his need being rhythmical, at the time when fruit and nuts offered easy satisfaction of a rhythmic hunger; he awoke at daybreak, and slept with the sun; rhythmic at all times.

Now, therefore, this early man's circulation and pulse must have been relatively rhythmic, yet there is no record of Music as an invention, until a new factor arose in his environment.* The needs of life began to suggest partnerships, children cemented parenthood groups, family groups met and associated with other family groups, still others were added and the Tribe was formed. Much of the Tribal life of prehistoric times is a matter of conjecture, but enough can be learned from the *mores* of later tribes, to suggest with reasonable probability some of the earliest tribal customs. Music is a late invention,

*The octave of half-tones sung by the Hylobates Syndactylus is merely an effort at speech.

but the elements out of which Music is fashioned —rhythm, motion and sound—constitute the first impulses, the first responses to stimuli in themselves rhythmic; and the oldest peoples exhibit traces of the love of sound in rhythmic action. The probability is that association, with man as with birds, developed a need of communication; from this need originated the acoustic formation of speech, and speech in turn brought the first conscious interchange of ideas. Intense mental action causes disturbed physical rhythm. Physical functions are not yet adapted to the physical disturbance caused by such mental action. The organs for the assimilation of the terrific stimuli of modern life, are still imperfectly developed, as is illustrated by the inability of the body to cope with increasing intellectuality, and the consequent alleged increase of insanity in modern times. As the eye has evolved from the sense of touch to its present power, and may progress to a capacity for still clearer vision, so has the nervous system evolved from its single cell, to its present cell multiplicity, and may develop new cell formations, with which to support changing degrees of added stimuli.

A departure from established belief will be noted at this point. Ideas were wonderful and powerful stimuli to the primitive mind. That extreme tension which causes modern minds to become unbalanced, is not proportionately more intense, than must have

been the reaction of the primitive mind, to the very first question and answer of primitive speech. A new stimulus acting upon a new organ produced a new disturbance—a disturbance of a life heretofore purely rhythmic; and a part of the internal organic family became separated for independent motion, became differentiated with a rhythm of its own, differing as a matter of course, from that old established rhythm of the most ancient physical life. Right at this point of development, the need of more or less conscious readjustment was instinctively felt. Internal rhythm had been disturbed, and man immediately invented an artificial producer of rhythmic vibration: i. e.—percussion. This sent into his nervous system uncounted thousands of rhythmic impulses, which tended to reestablish his disturbed rhythmic motion. To hold that the first rhythmic inventions are to be looked for in war songs, in religious rites, or in festal diversions, seems to us to ignore, not only all of the immensely important prior steps by which such comparative complexity has been attained, but also to leave the phenomenon of rhythm-craving, before the invention of the most primitive instrument, entirely unaccounted for. When the war element enters into tribal life, there has already been some growth of institutionalization. Home life, marriage, inheritance, government—these we find already in a certain stage of development, in the very

earliest tribes of which we have any positive knowledge. The life of these tribes, so similar in all parts of the world, produced certain disturbances within the original rhythmic bodily motion. The reaction to such disturbance was exactly expressed, in the rhythm producers instinctively devised at each stage. War was the only great disturber of habitual rhythm for ages, and consequently Music of a character to meet the need of this element was early invented.

For domestic rhythm-disturbing crises, Music—sound—was often employed by the tribes. The ancient Chinese[1] used to "sound" the house of a newly wedded couple, under the impression that in this way the bride and groom would enter a home "cleared of evil demons". Here we have a sub-conscions recognition of the actual driving force of rhythmic vibration. So, in ancient Japan, war songs were the old expressions of national agitation. These, accompanied as they invariably were, by high sentiments of loyalty and patriotism, steadied the rage of war-fever to a good fighting point, and prevented impulsive, or too reckless charging.

The Hindus[2] believe their musical scale is an inspiration from Heaven. Their Music is an expression of religious rather than military agitation.

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[1] American History and Encyclopedia of Music.
[2] Ibid.

When we think of how primitive man at first must have wondered at all the unknown forces about him, is it not possible to believe that religious, rather than warlike emotion, was the first to intensely agitate all early tribes?

The ancient peoples of Aryan stock seem to have been highly gifted musically. Probably because of their roving habits, their warlike spirit, or their pursuit of culture, the Aryans developed early and highly, this greater need of rhythmic stimulus in percussion.

Persian agitation took the form of occultism, as is shown in the devices on the walls of their fire temples. Their Music was held to be symbolic. They believed, for example, that Music was like a tree, and that its tones were representative of fire, water, air and earth, of the signs of the zodiac, of the planets and even of day and night.*

Music becomes combined with ideas in the expression of rhythm, in direct proportion to the development of ideas in the culture of the several races. When war ceased to be the chief factor in the disturbance of bodily rhythm, and still later, when periods of rest became usual between long wars, the impetus already given to tribes by the decisive occupations of warfare, and the consequent increased molecular motion of the organs, turned tribal at-

*Ibid.

tention in times of rest to thoughts of love, decoration and poetry, but chiefly to the thought of recording the stirring deeds of their heroes in music of some kind. The Indians have probably sung their deeds ever in rhythm, though often with an instrumental accompaniment in a differing rhythm, which common practice must have filled the need of a mental state "disturbed" by the stimuli of ever present danger.*

Rhythmic music considered as a creation of mind and as a need of the body, the measurement of the effect of musical vibrations upon human action, is sure to lead the way to a surprising fund of new knowledge. The number of vibrations caught by the ear in the simplest drum performance must be enormous, and when it is realized that these vibrations represent a live force striking the tense nerves, and that the effects are quantitatively measurable in a psycho-physiological laboratory, a significant

*It will be noted that the reference to ideas as "disturbances of purely physical, molecular rhythm" is used throughout this book, for it is here claimed that just as the unconscious cessation of breathing for a few seconds during the writing of an idea, expresses the check of mental action upon heart action and the circulation of the blood, so also does the continual reception of new impressions into the mind, affect the original regular rhythmic movement of the entire body. Hence thought is a real disturber of rhythm within the body. Similarly, any burst of anger, fear, or joy is immediately registered in the pulse.

development of psychiatry may be confidently predicted. It would be interesting to study the differing results of the same muscial environment, upon the nervous reactions of partially deaf, and of normal beings, to find out how far the subjective and conscious awareness of certain sounds, affects the objective physical results of the vibratory force producing them.

Animals are known to be sensitive to the sounds of Music, and birds even create that which is called Music; this creation on the part of birds, seems to us nothing more than their instinctive effort to re-establish disturbed internal rhythmic action.* At any rate, vibration is the fundamental element of Music as of life, and where Music exists there has ever been an antecedent excitement of some sort.

Complicated intellectual stimuli being absent in tribal life, the general rhythm was at most periods moderately easy to maintain. Events of sufficient newness to be exciting were rare. Tribal wars were felt to be the usual occupation of ordinary existence. So that whether polygamy or monogamy characterized the marriage relation, whether woman or man ruled the home life, whether human or animal sacrifices were offered to one or to several gods, the stimuli met in daily experiences were very

*We are aware that Darwin stresses the element of sexual selection in the bird's song.

similar in their monotony, and very much the same in all tribes. Customs were handed down from one generation to another, and carried from one part to another of the earth's surface, but ordinary experiences varied little until, under the stimulation of steam-driven engines and machines, nations developed the industrial fever, which seems to characterize modern times. Even today in localities where newspapers and railroads do not penetrate, life tends to revert to primitive ideals. The interests of the tribes lay in the raising of cattle, in the birth of male offspring, in the division of labor into the search for, and the preparation of, food, and in the unification of a strong group hostile to all other groups. These occupations coexisted with a simplicity of environment, unexciting to the reposeful sense organs, amid a scenic surrounding ever untouched by artificiality; where village scenes of little variety took place; where no reason existed to cause abnormal quickness of eye movements; where occurred only rare shocks to the regular rhythm of the nerve cell motions. Thus there was little or no need of complicated rhythm in Music. It will be remembered that Music is a need for that part of humanity or of any living organism which through reason of its prior reception of irregular stimuli, has disturbed the natural internal and independent rhythmic motion, imparted by the mother in the birth

process. An augmented heart action is not harmful at times, even if it be above the normal, but a heart action which is ever changing its beat, now fast, now slow, now weak, now strong, tends to derange the normal rhythmic life motion of the cells, a result caused by modern multiplicity of irregular stimuli, and observable in modern civilized man. Great multiplicity of stimuli the tribal man rarely experienced. His percussive Music was not complex, because the life stimuli were not complex; the nervous system of the savage was disturbed by but few mental processes—the simple results of the few and unvarying stimuli offered by his tribal life.

Approaching modern times, let us see what role was assumed by Music in the tribal life of the early Germanic races. In those times of war excitement, when tribes fought like wild animals, and the war spirit held full sway, the Germans on their march to battle, helmets decorated with the heads of animals, their big bodies clothed in the simple *sagum,* chanted their war songs, and kept up a rhythmic beating upon their shields. This ever visible trend toward rhythmic sound indicates a subconscious need of it, a need which often annoys us in our children's craving for the noise of percussion,—a noise, it may have been observed by long-suffering parents, which they love beyond all other diversions. So long as war and religion alone occupied mankind, and before

the human need of rhythmic sound became so pronounced, as to create the very complicated idea of producing vibratory impulse, from pleasurable sound intervals, combined with word pictures of human emotions—so long was mere rhythm in Music sufficient to re-establish disturbed internal motion.

The Gauls advanced a step beyond the Germans toward musical organization, by their maintenance of "bands of barders," who were described by Tacitus as accompanying the Gallic armies in order to cheer the warriors.

CHAPTER II.

Music and Motion.

Music, a recognized but still undirected agent for rhythm maintenance, is sought and produced in accordance with the disturbance of a body politic or of a body individual. The musical products of a nation mirror that nation's history far better than pen and ink can laboriously spell it out. Music reaches down into physiological and psychological needs, and tends to reestablish rhythmic equilibrium, whether applied to physical organs, or to members of a national body. And as the aggregates of matter and motion in human bodies combine all of their unequal, complex, and yet distinct rhythms under one mean rhythm, which becomes the characteristic rhythm of the whole, so do the musical products of a nation, during a given time or age, combine their unequal motions under a mean motion or characteristic, which includes all rhythmic products and which we see as a characteristic "color," or "temperament" in the national Music of that period. And as the mean governing rhythm or pulse of one being, individual or national, cannot be mistaken for the mean of any other combination than its own, so the "color" or "temperament" of the musical products

of one country, is clearly distinguishable from that of the Musical products of other countries.

In like manner, humanity, that larger aggregate of human molecules, shows a mean color in the united products or motions of its parts, the nations. The "tone" of the Music of the Nineteenth century, is more complex than that of the Eighteenth century, although Spain still re-establishes her Eighteenth century disturbances with Eighteenth century Music. England, with few deeply disturbed emotions is satisfied with doses of early Nineteenth century Music. France applies her own vivid intellectual sound pictures to her psychological and political disturbances. Germany finds the panacea for her disturbances in colors of soul tragedy and strong sentimentality. Italy, until her recent steps toward modern methods in stimuli productions, sipped her delightful comedy and her flowery tragedy, from graceful old-fashioned musical cups. Nineteenth century musical productions in England, France, Germany and Italy are, we may say, pictures of their several national "disturbances," and exact quantitative measurements of the depth to which the mean national rhythm was disturbed. All of these musical productions again react upon humanity's aggregate, and are combined under what is known as the Nineteenth century mean rhythm, or age characteristic.

As has been noted above, there are too few data

indicative of the habits of primitive man, for us to learn aught of his Music, but it is safe to assume that its comparative simplicity or complexity corresponded with the comparative simplicity or complexity of his mental and physical life. Undoubtedly, the earliest group complexity arose with roving habits, the entrance into new environments, and the subjection of man's psycho-physical system to new "strains" of disturbing stimuli.

According to this theory we must define "disturbances" as, such responses to varying stimuli as unduly accelerate or retard bodily pulse motion, changing the *normal* rhythm of the pulse. Examples are to be found in sudden migrations, outbursts of enthusiasm, wars, revolts, and even in certain eager intellectual pursuits.

Music is a phase of the evolutionary process. Musical evolution has also its order: (a) in appreciation,* when the primitive human mind becomes conscious of existing rhythm, of sound combinations; (b) in utilization, when its seemingly magical effect suggested its association with the festivities and rites of worship; (c) in characterization, when it stands on a pedestal of its own, recognized as a human necessity perfectly adapted to its environment; and (d) in socialization, when its end as an agent in self-

*Giddings' Descriptive and Historical Sociology, pp. 186 to 212.

realization shall be entirely comprehended. Characterization is the mode which Music has reached today. Socialization is just beginning, and is yet more fully to be developed with greater understanding.

Again in Musical Evolution there has been an ideo-motor stage of development.[1] This forceful, aggressive, persistent motor stage was shown in the rude drums and other rough-hewn instruments of early man. In its convivial imaginative aspect it has answered to the need of the ideo-emotional type. The dogmatic emotional need has drawn forth from that type's resources the austere musical products of master genius. Do we not find today in France, Germany and in modern Italy a national rhythm disturbed by critically intellectual[2] stimuli, which in turn call forth critically intellectual Music of the most distinct complexity? Music is both a social and a socializing force, which, although created by society, reacts upon its creator.

Reviewing the stages of Musical Evolution do we not discern concerted volition? Does not the mean tone of national musical types show concerted acceptance of that which answers to national tastes and needs? The very applause which establishes the modern type, is the outward sign of an inward intent

[1] Giddings' Descriptive and Historical Sociology, p. 237.

[2] Otherwise known as rationalistic.

to embrace that product. Cool and restrained judgment precedes *that* acceptance. Any audience manifests resembling sensations of resembling individuals in that oneness of criticism so generally exhibited. Clearly indeed in this latter case do we perceive that reflective sympathy which shows us how like to our neighbor we are. Then there is the evidence of organic sympathy which establishes that liking or disliking for certain Music, according as the mean motion or the rhythm of the Musical sound vibrations, correspond to a similar combination of motions and rhythms in our own systems. And is not the affection for a rhythm similar to our own, stronger than is our liking for one dissimilar? Can a dogmatic emotional* type experience a true affection for, or feel a sincere need of, ragtime ditties? Could Italy in the early part of the Nineteenth century feel affection for the Music of a von Weber? Could Germany in the fever of Franco-Prussian emotionalism feel affection for the works of Verdi? Paris disliked Wagner's operas until very recently.

Lest this should seem like an attempt to stretch sociological terminology to cover territory other than its own, let us continue our examination. Even in the progress from the homogeneous to the heterogeneous, Music, in its national parts, though highly heterogeneous like the integrated parts of the body,

*Giddings, op. cit. pp. 238-239.

is yielding to the social passion for homogeneity. This is indicated by the increasing similarity of its ideals. Even Italy in her new awakening is reaching out toward musical equality with the most complex modern ideals, illustrating the tendency of all inequality toward final equality.

The Music which answered to the needs of an Ethnic Society could not possibly re-establish the disturbed rhythm of political groups. The "gentile family" system for a long time successfully counteracted the effects of heterogeneous motion attacks upon the calm nervous structure, by a Music suited to its needs. Only with the decay of the patriarchal system did groups come to demand complexity in the re-establishing agency, Music.

Internal disturbances must have been rare in all clan life, surrounding stimuli being relatively homogeneous, simple and diffused. Paleolithic man, with his unchanging external environment, had little reason for internal disturbance. What slight disturbances he suffered were probably remedied by simple rhythmic composition of some kind: even babies create a pronounced sound rhythm with any instrument at hand, and indicate real pleasure derived from what to us seems mere noise.

Sounds produced by non-human beings are mere discharge of surplus energy, in a creation of rhythmic stimulus, and not conscious sound combinations

in song. Music is a "natural" product of *human* society. It must be as old as those integrations of parts in the human body, which became aggregates of matter and motion, to take care of new stimuli colliding with the motions already contained. Through lower, middle, and upper savagery,* even before the beginning of speech, Music must have been at hand, although in its simplest conceivable form. Music kept pace with the comparatively simple external stimuli of each period.

With the use of fire and of the bow and arrow in upper savagery, came a new heterogeneity in the stimuli entering the organism; disturbances were still simple, but with the domestication of animals, with the cultivation of plants by irrigation, with the use of adobe brick and stone in architecture, Music must have gradually increased in its complexity in order to cope with the new disturbances of bodily motion consequent upon those changes in man's reaction to his environment. Then, with the use of iron in upper barbarism, Music began anew to exhibit its needed usefulness, as in the Grecian tribes of the Homeric Age, and in the German tribes of Caesar's time.

By these times Music had passed well out of the

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*Morgan: Ancient Peoples.

stages of "appreciation," into those of "utilization."[1] Strongly rhythmic, it contributed to the recreation (re-creations indeed) of bodily equilibrium! It calmed intense inward motion, or stimulated flagging circulation in its union with religious rites. From such accomplishments of later barbarians as poetry, mythology, fine temple architecture, walled cities, ship building, wine manufacture, woven fabrics, implements for grinding corn, the side hill furnace for smelting ore, and many other early mechanical contrivances,[2] civilization evolved its phonetic alphabet and its literary records, building the rhythm-disturbing stimuli of civilization. In the meanwhile the family develops to the point of monogamy, and individual property rights usher in a new political system. An advanced form of municipal life in fortified cities having already created the ideal of city treasure to be protected, the step was ultimately taken from this to individual property rights distinct from those of the gens.

The fact that Music as we first encounter it is already somewhat complex, is not surprising when we regard it in terms of motion, duplicating in principle the construction of the human body. The latter may also be regarded in terms of motion; for

[1] Giddings' Descriptive and Historical Sociology, pp. 186 to 212.

[2] Morgan's Ancient Peoples.

what are bodily organs but integrations of molecules in motion? The rhythm of a bodily organ is like a note composed of periodic motions.* The various organs of differing masses and motions, acting together under one chief rhythm, are but chords of various notes, while that average of averages, the pulse, registers the governing rhythm of all of these together, as does the *time* in music.

With the differentiation of the Aryan race from those barbarians who were not active in making and utilizing new inventions, certain re-arrangements of bodily motions resulted which could not fail to "disturb" old life habits. With artificial rhythm already at hand, instinct alone would be sufficient to prompt its application. Appreciation of Music at this stage would mirror only the satisfaction derived from the hearing of rhythmic sounds, sufficiently varied to inflame or calm inward motion, without carrying it too far from the norm. The "gens" system as found in Greece, Rome, and among American aborigines, as also among the Irish sept, and Scottish clan, would tend to restrain complex emotions. Such gentes, being consanguine bodies, descended from the same common ancestor, and having a gentile name, and held togther by actual or fictitious ties of blood, were compact bodies with institutions comparatively simple. They were like primitive bodily

*Helmholtz, Sensations of Tone, Part I, p. 8.

forms, consisting of motions contained within an outer crust, and with few distinct inward integrations.

Music, as simple rhythm agreeable to the ear, would fulfill all disturbance needs of that time, and would itself be a mere contained motion, with few integrated parts. Only with the beginning of "rational" thinking or the "interposition of new ideas between stimulation and the consequent muscular action,"* does such complexity of mental effort induce the integration of new parts with new motions in order to meet the added strain.

*Giddings' Descriptive and Historical Sociology, p. 346.

CHAPTER III.

GROUP AND INDIVIDUAL REACTION TO MUSIC.
A Brief Record of Experiments.

Music tranquillizes human agitation. We believe that enough of musical vibration will tranquillize all agitation, whether it be such as is manifested in abnormal mental, or abnormal physical movements. Music acts differently upon those low states of motion represented by the phlegmatic temperament and rural communities. Here music excites more than it does when colliding with agitated nerve motions. These two marked effects of music were noticed by the author in the following experiences which extended over a period of many years, among all of the classes which compose the civilized group:

From Concerts through Canada and Western U. S.

From three successive tours of the Baltic Province of Russia, with audiences of the Ideo-Emotional and Dogmatic-Emotional types.

From Concert and opera tests in Germany and England.

From Concert and opera tests in the Eastern States of U. S.

From Concert and opera tests among the revolutionary elements of New York City, including Coney Island tent life for five months, lower East Side social work for five years, Brooklyn Working Girl tests, church, political, and society study among actual audiences represented by these classes.

More than two hundred thousand people were ob-

served during these tests as to the effects of music, and the results suggested the following needs, which the author believes may be extended to the treatment of many diseases of the mind. Abnormally heightened or abnormally lowered bodily agitation, or inward motion, "needs" rhythmic stimulus from highly agitated motion, as in music; the *like* state of highly agitated motion in the body responds to the stimulus in calmed motions; the abnormally lowered bodily agitation responds to the *unlike* stimulus in the highly agitated motions of music, in excitation: a perfectly normal body "needs" no music (but such do not exist).

(1) Those social and individual bodies manifesting abnormal states of agitation "need" contact with such a body of rhythmic musical vibration as will calm and impose a normal rhythmic motion upon the disturbed motion represented by the agitation.

(2) Those social and individual bodies manifesting abnormal states of phelgma "need" contact with such a body of rhythmic musical vibration as will *excite* the low motion states, and impose a normal rhythmic motion upon the sub-normal motion represented by the phlegmatic states.

Above conclusions are offered as a result of the following types of experiments.

Experiments Upon the Ideo-Motor to Ideo-Emotional Type.

Desiring to try the effects of music combined with lectures of a political character, among the lower elements of Coney Island dwellers, we set up a 60x90 ft. tent at the foot of Ocean Parkway, in May, 1909; 600 chairs, a decorated platform, a grand piano and gay flags of all nations were distributed in their proper places. The subject of all lectures was *Woman's Suffrage,* a theme most unpopular at that time and especially distasteful to a Coney Island mind. The prevailing religion of the district was Catholicism. The first week was devoted to suffrage lectures without music. Crowds filled the floor space of our big tent each night, and from the beginning we distinctly felt the murmurs of intended trouble. Our speakers were men high in public favor, but one of these made the following unfortunate remark:

"Catholicism is the curse of the laboring class."

Then a workingman stood up and hurled uncomplimentary epithets at us for trying to destroy the laboring man's only blessing—his faith. A woman added tears for her beloved church, and a socialist added oil to the flame by a bitter attack upon religion in general. Before we could make ourselves heard, a fight ensued which attracted a large outside crowd. Several policemen finally dispersed the excited aud-

ience. Our broken chairs bore mute witness of the damage, but no intention of giving up was entertained. The certainty of serious trouble for the following evening hastened our institution of music in the program. During the afternoon following our mishap, we were informed by the police that trouble was brewing for the "tent folks." With some trepidation we entered the tent that evening. A large crowd of the "rowdy" element had gathered by eight o'clock. Four policemen guarded the entrance, but many very rough looking men crawled under the canvas at the sides and cast knowing glances at acquaintances.

Our artists for this first program had been carefully chosen, a soprano, delicate in voice and personality, a genial looking baritone, an excellent "cellest," one of our best known violinists, and a pianist of world-wide renown. We all "held our breaths" in anticipation of what might happen. The speaker began. Immediately cat-calls and horns drowned her voice. The air was filled with foul epithets. Suddenly some one threw a stone which struck the speaker on the cheek. The meanness of the insult quieted the mob, and an officer removed the offender. Then in a few words the people were asked to reserve judgment until after the musical program.

A trio performance for violin, "cello" and piano was given. Whispering and excited murmurs con-

tinued all through this long number, but when the soprano sang the old love aria, "Ah, fors' e lui," from "La Traviata" by Verdi, a sudden hush fell upon the audience. At the close of this aria, emotional, tuneful and simple in construction, a storm of applause broke forth. Encores of ballads followed, and when "The Last Rose of Summer" was given, with the emotional addition of a genuine red rose, whose petals were scattered in compliance with the text, women wept, and men settled down sullenly in their seats. The irritation of the preceding three days had been reduced to normal rhythmic motion, in less than one hour of musical treatment. The rest of that evening was in every way a success.

This was not an unique experience. Musicless lectures were always more excitable in effect than were those combined with music. So certain were the results of our combination, that before the end of the summer, we could discuss any "views" with a mob element, by alternating an exciting subject with an artistically rendered musical selection. At every step, music proved its power to soothe, and showed how great is the human need of its vibratory mission.

Instances of similar effect of music upon mental agitation were observed in other situations. During a trip across the Atlantic on the old vessel "Trava," a dangerous accident occurred during a severe storm. A panic threatened. The first officer whispered to

the author to sing a song. She started the national hymns, inviting the passengers to show their patriotism and nationality by joining. First the "Star Spangled Banner" brought out a few voices, then the "Wacht am Rhein" swelled the chorus; the "Marsellaise" was then responded to, and when "The Wearing of the Green" brought forth one lusty Irish brogue, such a laugh ran round the dining saloon as completely broke the strained condition and re-established normal rhythmic pulse motion.

The tension of nerve during strikes was reduced several times by musical "benefits." Dangerous excitement at political meetings was often converted into harmless emotionalism under evenings of Eighteenth century comedy opera tests on the East Side of Manhattan. The establishment of The Working Girls Club in Brooklyn in 1912 afforded an excellent opportunity for testing the reviving effects of music upon tired brains and bodies. One hundred and forty young and healthy working girls from department stores, telephone offices and factories, used the club house dedicated to their use and at first evidenced pleasure and benefit from the classes instituted. But presently a depressing weariness of aspect appeared, a "trying to learn" expression, which promised little for energetic application. The law class dwindled to two members; the millinery class could not attract more than six students, the cooking

class began with thirty-five and ended with four, the dress-making class held but three pupils: the class in simple science was not attractive, the language classes began well, but the girls were too tired to study. Finally we gave them what they wanted, and what they needed—music. What a change came over the mental attitude! Monday, Wednesday and Friday nights, singing individually and in chorus was taught. Three hours of music swept away all traces of weariness, and sparkling eyes and rosy cheeks exhibited anew the need of music. All through the year 1912-13 for twelve months, the opera "Martha" by Flotow was rehearsed, and never was there occasion to complain of poor attendance, wandering attention, or lack of interest. A public performance was given in the Spring of 1913 at Labor Lyceum, Brooklyn. Notwithstanding long days of labor, the girls did great credit to their leaders' work in training.

Turning to individual experiments, an instance of the strangely normalizing effects of music upon abnormal nervous conditions comes to our mind. A noble minded woman, lately deceased, devoted her life to the Sittig Christmas Tree Celebration, which annually gave a Christmas feast of presents, candies, books and entertainment to about seven thousand of Brooklyn's poor children. She was so deaf that she heard with great difficulty, even with the aid of elec-

trical devices. Yet she could hear softly spoken words, *provided the speaker kept playing softly upon the piano during the conversation.* "I do not need any artificial aid in hearing any sound audible to a normal ear, while music is in the air," she once told us. Another woman, affected with continual trembling of the hands, became perfectly quiet and normal in action while riding in a carriage. In reply to our question as to the reason for this phenomenon, she replied, "The noise of the carriage wheels resolves itself into regular 'beats' which I cannot help trying to imitate." It may be that this is but another illustration of the "need" of disturbed or unrhythmic motion for "regular beats" or rhythmic motion. A friend in Berlin was painfully deaf, yet he heard the slightest whisper over the telephone. His similar normality when listening to music, suggested to the author to class all rhythmic co-operated vibrations producing a *continuous sensation* in the ear, under the name of musical rhythmic vibrations. This would extend the realm of musical need to many highly active motions not generally included in the term "music." Telephones, railway motion sounds, moaning of winds, continuous washing sounds of waves, do in fact produce results strangely similar to those seen in the application of music. Excitable people are quieter at sea-side resorts, and restless in isolated mountain districts. We have closely ob-

served the types of individuals at water resorts in Europe and America. Everywhere the same type prevails. It is the highly strung temperament which needs and seeks the "highly strung" atmosphere. We have observed like instances in nervous university students, who study and memorize best in the street cars.

Ideo-Emotional Groups.

In our German experience, the music which elicited the largest response seemed to be that which impressed emotional pictures upon the mind. Schuman lieder are of this character: they are full of chivalric example, suggestion, symbol, shibboleth, and tend to awaken emotional reactions. In the home circles, the sentiment in music is strongly expressed. No true German will allow you to heighten the seat at the piano with a volume of Beethoven Sonaten. You cannot sit upon Beethoven in a loyal German house.

Even in the grand opera audiences of Germany, the public persists in manifesting a love for those musical ideas which awake emotions rather than cool critical judgment. The simple Kinder Lieder can be counted upon to bring the emotions to view, and unrequited love, the romantic woes of a god-like hero, or the dainty texts of sentimental ballads, are as effectual now as they ever were. Russian audi-

ences are still more responsive to the emotional element in music, but their temperaments have a strong dash of the Ideo-motor in them.

All through Canada and the Western part of the United States, the Ideo-Emotional type of music awakens quickest response. Old ballads like "Coming Through the Rye," "Home Sweet Home," "Annie Laurie," will bring applause during the preludes, and only in the most complicated environment is there a genuine response to the relatively complicated works of Wagner.

In a concert test upon the stone-working Italians at Wappingers Falls, N. Y., the home-sick Italians were so affected by "Santa Lucia" that they all closed their eyes and joined the singer, weeping as they sang. It was reported dangerous for a woman to go alone among these men, but they sang song after song for us, and escorted her five miles to the railroad station.*

Dogmatic-Emotional Types.

The Greek Church music and the music of the Catholic Church acts specially upon the Dogmatic-Emotional types. It is a curious sight to Americans to watch Russian peasants and officials praying in

*An atrocious murder had been committed by one of this group during the week and the Mission Superintendent warned us by telegram of serious revolt and danger.

the railroad stations before rough altars and highly gilded images. The candles, always burning, suggest the strength of that command, authority, dogma, belief, which lies so heavily upon Russian minds. Under such a burden, the type of music must come within the restricted range of comprehension permitted to this type of mind. Yet this enforced religion does not act more sternly upon the choice of music in Russia, than does the free Dogmatic-Emotionalism seen in Ocean Grove, N. J. Here you find response to the same musical type that satisfied Russian audiences of a Dogmatic-Emotional character. Ocean Grove inhabitants do not pray in public stations, but no car runs on Sunday; no wagons deliver goods on the Sabbath, the rules which govern conduct and musical production in Russia, are not more strictly obeyed than are those which frown upon Sunday amusement in Ocean Grove, or dictate its musical supply. Strange to note, the Catholic element is more open in its "desecration" of the Sabbath, than is the Protestant element. This may be accounted for by the larger degree of Ideo-Motor activity among Catholic groups, notwithstanding the strength of the Church hold upon the fidelity of its members.

The Dogmatic-Emotional groups "need" a music to correspond to their type, and only such music is successful with them. Many years in church circles

have proved to us the real desire or "need" of hymns and sacred songs, as a satisfaction of this type's yearnings.

The Rationalistic Group.

Now we come to a class of comparatively few representatives. It presents a nearer approach to symmetry in its curve of mental and physical poise. It responds to stimuli appealing through knowledge to the higher intellectual processes. Ideals are stronger than their physical manifestations; the idea is more important than the model; the type is less affected by common stimuli; it secludes itself in contemplation, in more cool investigation of its own responses; it seeks food for mental labor, with time for detailed analysis of that work. All this means a more normal equilibrium between periods of high motion and rest; it means that a smaller chance of "disturbance" is encountered by this type, and consequently a smaller "need" of *rhythmic* music. The problem opera will satisfy it. In less need of marked rhythm, the analysis of new musical form will occupy these minds, regardless of the lack of either rhythmic or harmonious effects. The smallness of the Rationalistic group is indicated by the unpopularity of rationalistic composition. Opera managements produce the new "rationalistic" works, but they make up their financial losses by the Ideo-Emotional works

like Faust, Carmen, Cavaleria Rusticana, Madam Butterfly and most of the beloved works of the popular operatic repertoire.

Thus we see that if music is a human need, it is a need greatest among the Ideo-motor and Ideo-Emotional types, or among the lower and middle classes chiefly. The Dogmatic-Emotional type needs a music of its own, and never fails to produce it. The Rationalistic type, also needs its music, because its rationalism has not yet extended to an absolute perfection of equilibrium between dissipation and integration of bodily forces, and wherever abnormality of pulse exists, there musical rhythm is "needed." Even were this theory of musical need not admitted, the genuine love of music constitutes a need. So intense a yearning, unsatisfied, cannot be beneficial to the human system. Whether we admit music as a necessary part of human pleasure, or as a necessary stimulus to human rhythm of bodily motions, its "need" will scarcely be denied in the face of its constant demand and supply. Music reinforces human energy, aids in the control and order of the mind, elevates the conception of life, and furnishes repose for the overstimulated nerves of urban communities. Placing music then where you will, it belongs among those "better materials for storing, conveying and transforming energy"* and its wise application may

*Professor Giddings' "Law of Increasing and Diminishing Returns" would apply here as elsewhere.

lead to surprising results, in the conservation of faculties, now doomed to decay under the law of diminishing returns.

That some change in the bodily molecules takes place as a result of musical indulgence is believed by the author. The change in the pulse rate before and after a musical performance indicates an effect upon the circulation. The same time spent in listening to a lecture, shows less freedom from tension. This was shown in the 84 experiments with working girls. The 103 benefit tests upon revolutionary audiences showed marked effects in calming power: ten years' experience in church choirs, showed the vast superiority of service with music, over service without music, in calming excitable congregations and in rousing phlegmatic ones; ninety-one consecutive experiments at Coney Island demonstrated that music can calm revolt, and change irritation to tranquillity; over three hundred concert studies in Russia and in the United States have shown marked increase in the normality of expression in audiences, after an evening of music, and twelve years of experience in teaching music, have shown so decided results in greater health and happiness in pupils, that music as a human "need" appears to us to be established beyond doubt.

The Federal government of our United States may not be able under its Constitution to institute Schools of Music, but the states should begin to give

more consideration to State Schools of Music. If the U. S. Government is constitutionally unable to maintain National Schools of Music, any comparison with European governments so licensed by their constitutions, would be unjust and misleading. The statistics given are intended merely to show what the various governments are doing along the line of national support of musical culture, and no comparison is attempted. Our States and cities are expending vast sums upon music. The contention of the author, however, is that State Musical Colleges will not produce a national type of music, and that the highest ideal rests in a Federal control of musical culture. When music can be regarded as a national need, and not merely as a social diversion, the Federal government may see its way clear to a Federal support of musical education. Music as an important measure in social control, and as an equally important factor in individual health, belongs under the eye of the national head. With the faint hope that this place will sometime be granted to music, we submit this work.

CHAPTER IV.

Toneurology: A New Branch of Study.

Humanity then must maintain its pulse in a rhythmic-stimulation-and-repose-for-distribution system. This can best be done by the greater exercise of the emotional nature, and by the indulgence of romantic ideals, for emotions are pulse-lifters, dragging the stagnant life motions up to a normal mean rhythm. The man or nation, whose pulse is kept most constantly keyed up to the normal, is the man or nation which achieves the finest results. Our four national examples, England, France, Germany, and Italy, demonstrate these emotional products. Germany leads in her quality of musical (or emotional) output, because she led during the century in her sufferings, prepared, as they were, by so much of heart breaking experience during the preceding century. France comes next. Her national emotions have been weakened in tragic elements by the love of the spectacular, by the intellectual need of vivid pictures and colors, and by the assertiveness and pride of an ancestral supremacy, hard to subdue to the state of tender romance and heart tragedy, which characterized Germany's strong and sentimental temperament. After France comes Italy, emotional, poetic,

merry-hearted, making a farce of tragedy because her century's life produced so little national sadness. Only in recent years has it come to be felt that the mean rhythm of Germany can become like the mean rhythm of any nation, even of Italy, if the depths or motions are sounded as were Germany's. England brings up the rear, her century's mean rhythm being far below the high water mark. This is shown by the delicate comedies, and naive sentimentalism of her music, which are the fit measure of her national pulse rate of emotionalism.

Music, as a human need, carries us deep into the secrets of life, and will in time open the way for a new science. Music is not the name for this new branch of knowledge, as the study would involve an exhaustive investigation of nervous reactions in their social and individual relations to sound vibrations. We would suggest the name "Toneurology" because tone is understood in all modern languages, and "neuros" has the same advantage. This study would involve research along entirely new lines, such as an investigation of motions in bodily organs; mathematical estimation of the vibration value of each pulse beat, and of the sums of tone vibrations in chords, upon one instrument and upon many, as in an orchestra; the rate of increase or decrease of the pulse after contact with tonal force, with approximate computation of the time that the latter can

maintain a normal pulse, and the necessary frequency of its application. The research student in this new science must have a working knowledge of physics, biology, pyschology, sociology, harmony, counterpoint, musical history, political history and physiology, with a new study of the Human Will. We should thus add a new science to the group of exact concrete sciences.

It is with no little diffidence that we suggest this as a new branch of study. There are indications that universities adopting Music into their lists of studies, recognize the need of Music's closer touch with scientific courses. If Music is ever to outgrow its swaddling clothes of sentimental and frivolous superficiality, and mere amusement conception, it must clearly manifest its scientific dignity, and its inseparable connection with physics, sociology, biology and pyschology. It must take its place among those studies which encourage scientific tests and life-long research. It must leave its hitherto "divine aspect" on the rubbish heap, along with the "divine rights" of kings, magic, ancestor worship, and ghost theories. We believe some secrets of life preservation will be found in Toneurology.

The curious effect of Music upon groups suggests a possible counterpart of such reaction upon individuals. Music, once regarded in terms of motion, with laws of motion likewise applied to the bodily integrations, the path opens out clear and true.

The fact that men, in spite of all the great scientific discoveries, harden and fade with age, tends to prove that the human body has not been completely envisaged by any or all of them. We offer here a study which includes many of the abstract and concrete sciences but directed towards a new combination, *i. e.*, tone and nerve, to be tested and quantitatively measured under the laws of motion instead of under the laws of perception and of appreciation. We take Music out of the field of ideals entirely, and place it upon a level with rhythm establishers, incident forces, and pulse fillers. Our statistics* show the sub-conscious appreciation of Music as a human need by the countries represented, and those governments show a larger proportion of internal unrest where musical provision is small. This test, although indicative, is far from satisfactory, since no provision, adequate to act constantly upon the life forces, has as yet been made.

*See page 102.

PART II.

The Inter-Reactions of Music and National Life.

Introductory Note to Chapters V-VII.

The following outlines of musical productions during the Nineteenth century in Italy, England, Germany, France, and the United States, are intended to show how precisely the depth and nature of disturbances are measurable by the Music of each country. Each musical type pictures the "need" of the nation in question, and is peculiar to the character of each human aggregate.

The statistics received by us and presented later in this work,* indicate not only the extent to which Music is now regarded in its utility aspect by different nations, but also show the protection given to this as-yet-misunderstood force. In this day of general culture, the reader's acquaintance with the main outlines of the political and economic history of these peoples may be assumed. The Music of each nation will be seen to picture closely the national emotions consequent upon the national stimuli.

*The statistics upon which these conclusions are based will be found in Appendix C and E.

CHAPTER V.

ITALY (1800-1913).

National Music is the language of national emotion. The latter is the result and reflection of economic stimuli. The Music of a period exhibits the characteristics of national disturbances at every point in economic history.

Italy, subjected to a much lighter form of stimuli than England or Germany, has not yet ceased to manifest her short-duration-excitability, her love of the merely sensuous in beauty, which shows that the ancient intense disturbances of her real depths have not been repeated in recent times.

The period from 1800 to 1848 presents a mental state of little disturbance, the Italian social mind having not yet awakened from its Eighteenth century submissiveness and inaction. It will be interesting to analyze emotions of this period and their expression in Music.

Was tragedy the dominant factor in economic life? No. The social pressure of this period was light, even merry, with the lightness of lazy enjoyment in an unambitious mind. Curiosity was awakened but it was in its wonder stage, acting slowly upon hints received from the cynicism of France, from the

power of labor ideas from England, and from the disrespect for Papal authority coming from Germany. Like a mirror for the reflection of the sharp but shallow emotions produced by these stimuli, were the musical works of Rossini constituting the public emotional valves. The "Barbiere di Sevilla," with its witching humor, its delicate satire, its political allusions, and its portraits of the life of the nation, was a constant source of delight to unreflecting Italian thought. Rossini's skill in the opera-buffa was marked. For the party of the Catholic faith he composed his "Stabat Mater," equally fine, but picturing even in these more serious emotion-valves, those superficial moulds in which the public thought was cast. The works of Donizetti were no less bewitching and no less trivial, while the soft and sentimental character of Bellini's genius found answering echoes in every Italian ideal. Dramatic passion was not lacking in "Norma," but the atmosphere of even this glimpse of future depth in Italian emotionalism, was never quite free from the weak traits of Bellini's school. Vocalism extraordinary was the demand of the opera, and the display in voice technique was remarkable. This was not, however, out of place in comedy opera, where depth of sentiment never reached the modern ridiculous spectacle of vocalized heart breakings, tuneful murders, and death gasps upon assigned tone pitches. The over-dressed

orchestrations of present day operas, the senseless howling of a single voice above the combined vibrations of a hundred or more active instruments, the absurd idea of profound *vocal* passion, had not yet distorted the original operatic idea, which still dwelt in the true realm of its effectiveness, namely, that of the presentation of the lovely, the gay, the pathetic, the comic. The supremacy of the human voice as a vehicle of expression was in no way endangered by the abnormal taste of our own day. Toward the middle of the Nineteenth century, as the spirit of the time deepened in intensity, operas of a more serious nature held their share of public attention. Donizetti's "Lucrezia Borgia" was presented in 1844, after several others of dramatic color, among which Rossini's "William Tell" and "Othello" were works of real dramatic power.

For several centuries the State had exercised control over musical education in Italy. In Rome, from its earliest days, institutions of Music had existed. Music was regarded as a necessity rather than as a luxury. Such will be the attitude assumed toward Music in the future, when psychologists and sociologists shall have studied more deeply into the relations of artificially created rhythm to bodily rhythm, and also into the need of re-establishing disturbed bodily rhythm, manifested in the abnormal pulse during emotional states of mind.

During the Eighteenth century each of the large towns of Italy supported its own opera house and one cannot estimate to what extent these emotion valves were instrumental in the easy subjugation of the people.

Were Music to be banished from any one of the civilized countries today, anarchy might very shortly result. Who can say that the frenzied license which followed Cromwell's suppression of musical indulgence, was not due in part to the closing of England's emotion valves?

The present craze for the violent action dances, represented in the turkey-trot and the tango, is, in the opinion of the author, a natural expression of the human need of pronounced rhythm. It is a sub-conscious effort to supply the lack of pronounced rhythmic stimulus in economic life. The late tendency in musical composition has also been away from the old rhythmic accent and in the direction of disturbed harmonies, and lack of restful melodies. Thus the over-stimulated nerves of humanity have been exposed to an unchecked abnormality of their motions. The dances above mentioned partly remedy this defect in bodily action, and restore relative equilibrium —hence the craze for this form of amusement. Notice, however, that people will not take part in either of these dances for a moment, *without the Music.* The movement alone is not the need; the

Music is the chief factor, the rhythm of which is merely accented and accentuated by the movements. These dances may be saving the sanity of countless thousands. Why then the suggested ban on this human need? If these dance forms are not desirable, then sweep away the present musical abominations and bring melody and—above all—*marked rhythm* within reach of the masses.

We shall now proceed to take up the thread of Italian musical life at 1848 when social pressure was assuming a darker hue, acute even in its short-lived terrors, as befits the Italian temperament. This temperament, unlike that of Germany under tragic conditions, must either die in despair or recover quickly. It is ever in short runs between sobs and a jest, ever in fiery moments and merry half-hours, ever child-like at heart, yet marvellously gifted, beauty-loving and sentimental. Italy might not live through a "Thirty Years War," but with the inspiration of the right leaders, she might create a new Roman Republic, under the forceful stimulus of oft-relieved bursts of enthusiasm.

The strenuous years from 1848 to 1860, sufficiently aroused the Italian spirit to produce much that has since developed to the credit of the country. A deeper tone had been struck in Italian ideals, though not sufficiently deep to revolutionize completely the

nation's taste for those old forms of Music, so essentially a part of the melody loving race.

Still tragedy shadowed the public mind, and Verdi pictured these gloomy years in the operas "Rigoletto" (1851), "La Traviata" (1853), "Il Trovatore" (1853), and "Aida" (1871). Verdi was the idol of the people, because his genius fitted into the conditions of his time, illustrating the theory of the present investigation.

The ignorance of the Italians, patricians and peasantry alike, made the functioning of Italy's really great literary works during the Nineteenth century, impotent as stimuli productive of national and contemporaneous reactions. Of late, however, a new educational impulse has been given by the establishment of the public school. This is certain greatly to increase stimuli products in the Italian nervous system, and the Italian need for a corresponding complexity in its Music is even now being manifested.

With the installation of transport facilities to the new world, a fresh and somewhat romantic stimulus has been given to the Italian people. The letters of absent relatives reflect world news, and widen mental views for whole villages. Besides, railroads have opened up new intercourse between the various parts of Italy, and the telegraph, electric light, new home inventions, industrial occupations, factories and so forth, each in turn—or at times all together—have

disturbed the bodily rhythm by increased stimulation, so that the late demands for realism in France and Germany did indeed find partial echo in Italy, in "The Cavalleria Rusticana" of Mascagni, a spectacular but not profound opera, which aroused amazing enthusiasm by its characteristic presentation of familiar forms. These were new in their realistic color, yet old in Italian life, and they pictured in their dramatic action, the stronger taste of the day. Puccini mirrored the still deeper stimulus of his time, in his "Manon Lescaut" (1893), "La Boheme" (1896), "La Tosca" (1900) and "Madam Butterfly" (1904), the latter inconsistent in its mixture of tragedy with soft Italian tunefulness, for even Puccini fails to discard the characteristic tunefulness of his race, in his too evident striving for such discordant effects, as, however, unintentionally represent the discordant elements in Italy's modern civilization.

These works show that Italy has awakened from her lazy sleep under the rule of foreigners, and that she is now beginning to feel the stir of larger economic disturbances, in those depths of the social mind, already so thoroughly stirred and active in France and Germany.

The care given to the musical needs of Italy by her central authorities is shown later in this book.*

*See Appendices C and E.

CHAPTER VI.

England (1800-1913).

The history of England during the Nineteenth century presents but little disturbance at home, along lines calculated so to move mental depths, as to produce complicated re-establishing forms in musical rhythm. Labor troubles harassed the national thought in their usual superficial manner, rarely causing the loss of a night's sleep, or the disturbance of appetite, and the many reforms in the interest of trade, affected but slowly the depths of emotionalism. It has ever been a noticeable fact, that impersonal or distant calamities but slightly arouse the national emotions. People read and comment upon the slaughter of women and children, and at the same time pleasurably partake of a good dinner. The fact is, that emotions are not easily aroused by distant stimuli, and people also respond with ever decreasing force to unchanging present stimuli.

Present day labor agitations have already passed the boundaries of mild stimulation, and are fast becoming emotional forces which are evidently driving headlong into governmental change. Capitalism has run its oppressive course, and for the near future a

genuinely soul-tearing agitation is preparing, which, if allowed to rip open the veins of the nation, will produce the stimuli, that eventually will endow English Music with a richness and depth, superior to that of any other country. British emotions have been sleeping deeply under two centuries of mild emotional stimuli, but when they do stretch their strong fibres for action, then one may indeed tremble for the old systems of English government; and then also the great musical triumphs of Belgium and Germany may be surpassed. Considering the mental attitude of the British community during the Nineteenth century, and at the present day, it was to be expected that Balfe's "Lurline" should represent the nation's rhythmic need up to 1870, and that the musical works of Benedict ("The Lily of Killarney," and the oratorios of "St. Peter" and "St. Cecilia"), should have found popular appreciation up to 1885. But the composer who best illustrates England's characteristic activity, —that of colonization,—its military and political aspects, the clean minded and religious attitude of Victoria's rule, and the general lightly disturbing characteristics of Nineteenth century economic stimuli, was Sir Arthur Sullivan in his charming works, "The Mikado," "Pinafore," "The Pirates of Penzance," "Patience," "The Yeoman of the Guard," "Iolanthe" and "The Sorcerer." England did much in this century to advance the culture of Music within

her borders. The Royal head was patron of such institutions as The Royal Academy of South Kensington, The Royal College of Music, The Guildhall School of Music and Trinity College. These are in general supported by government grants, donations, and subscribing patrons.[1] The national faith is still strongly expressed in the extensive cultivation of the oratorio, while the secular ideal has not yet become sufficiently abnormal to genuinely encourage Music of the present French and German schools. This is probably because England's emotions are not in need of such representations, since they are still adequately reflected in the lighter works of Italian genius, as expressed by Verdi[2] and in her own lovely light operas. It seems more than a coincidence that the Music of a country so marvellously reflects the character of the economic stimuli of its period, as does Great Britain's.

That England has a genuine care for the development of musical culture in her realm is shown by the letter from the Board of Education, Whitehall, London.[3]

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[1] "American History and Eneyclopedia of Music," volume on Foreign Music, p. 206.

[2] We leave out of account his "Falstaff."

[3] See Appendix E.

CHAPTER VII.

GERMANY (1800-1913).

The world today is still perceiving in Germany's Music, the intensity of Germany's emotions, as aroused during the Seventeenth and Eighteenth centuries.

Let us see if Germany's tragic emotionalism has produced its likeness in Music, thus wisely furnishing an outlet for revolutionary energy, and at the same time wielding a powerful and tranquillizing wand over a growing restlessness of spirit. Let us see whether the great tragic depths of emotional life through which Germany has passed, during at least two-thirds of the Nineteenth century, support our thesis by having resulted in the creation of a deep and tragic Music, with revolutionary harmony at its summit.

Ludwig von Beethoven's genius was such as greatly to influence the entire Nineteenth century Music. He reigned supreme in the symphony and sonata fields, where dignified composition found its most fitting musical forms. The public was, at the close of the Eighteenth century, actively supporting its own musical market through publishing houses

and public concerts, so that the exclusive patronage of the nobility could be largely dispensed with by composers, to their own infinite advantage, by making possible a wider psychic expression in their works, and in the production of Music of more pronounced national color. Pensions were still granted to noted composers, but these did not fetter them as completely as they had formerly done. That Germany, at that time, could produce a character so simple and noble, as was manifested by Beethoven's life, suggests the religious stimuli which acted upon his parents. All of his early works exhibit this chaste adherence to the established ideals in Music. Beautiful depths are revealed everywhere, and a solemn earnestness pervades his lightest productions. We love and revere Beethoven, unconsciously feeling some strong, pure and noble influence which was awakening in the German mind.*

The early years of the Nineteenth century brought, with their political disturbance, a taste for the old knightly ballads. These were, with the "Lieder," which so closely pictured the newly rising fearlessness of the people, beautifully expressed in the genius of Franz Schubert. At this time the social

*Even Beethoven illustrates the progressive idea of the time, in the evolution of free initiative in new forms, exhibited in his symphonies, which are progressive steps in greater freedom of treatment, from the first, to the revolutionary introduction of choruses in the ninth.

position of the nobility was as insecure as was the political peace of all Europe. The rise of the people's voice was shown in the importance given to the "folk-song." Great emphasis was now laid upon the texts of these songs themselves, thus again subjecting Music to poetry, the people's speech, as opposed to what was the rule in the Eighteenth century, when texts meant nothing to the empty-headed aristocracy, and sensuous tones and bewildering technique held sway. Yet rhythm still remains marked, and the tunes are still full of sentimental suggestion. Song is not the vehicle of intense emotion, and indeed at this period, emotion had not yet reached a point of intensity in German economic life. The great emotional possibilities of Germany were still subdued by petty powers, and the "Lied" sufficiently expressed the social pressure of the time, when the people did not care much who ruled them, so long as there was enough to eat, and so long as good beer accompanied their merriment. Tragedy was in action, but had not yet dug her claws into the depths of German emotion. It was not the time for deep dramatic opera. The prevailing taste craved the romantic quality suggested by war heroes of the Napoleonic type. Napoleon's almost unvarying triumph embellished his reputation with god-like, impossible attributes. Finally his romantic sway and sad end awakened echoes of ancient chivalry in the thoughts

woven about his name. As a matter of fact, Schubert's works were not published before 1821, because the German musician was still dominated by the Italian school. The disturbed period before this date was unproductive of nationalism in any form. The mental color of 1821 was essentially lyrical, and Schubert's songs struck the right note in public feeling from this date on. New forms were arising on every hand. Classic themes had had their day. Schiller and Goethe had inspired art and literature with new ideals. Carl von Weber exhibited new methods in his epoch marking German opera "Der Freischutz," in 1821. This opera sounded the death knell of the reign of Italian Music in Germany. In this work von Weber dared to picture the real life of the German people, and to give the folk-song a prominent position, though he weakened the presentation by the introduction of supernatural effects.

Note the public mind in this success! Germany wanted its own texts, its own life, its own style represented in the Music it was to enjoy. When had the Germans ever dared to show so strange a tendency before? Then came the "heroic" opera with its silly plot, sustained musical invention, new method of treating the recitative as part of the melody, and greater richness of orchestral effects, in which one sees the first touches of real dramatic instrumental treatment. Von Weber was the flag-pole for the

banner of Wagner, and his genius is a true reflection of Germany's social pressure. Up to 1859 Spohr exerted a serious and dignified influence upon the violin art of Germany, but his heavier works did not reach the importance of von Weber's, which had truly illustrated the mental tendency of the time. In works of great beauty and merit Kreutzer, Lortzing and Nicolai represented different phases of this social mind.

Robert Schumann did not contribute to the actual need of the people until 1840-1841 when he produced a large number of exquisite songs. His paino works, however, exhibit more originality and greater strength and depth; they indicate a greater mastery of the classic ideal, show extended chord effects, and present broadness of idea. A new feature here was the syncopated accent.* This was the beginning of that breaking of the rhythmic effect which, to our mind, has not only been detrimental to the beneficial results of Music as a rhythm-re-establisher, but which has also been the forerunner of our American "craze" for "ragtime" Music. It was an "out-of-order" effect, and came from an "out-of-order" mind, for poor Schumann died insane at Bonn in 1856. Schumann, more than any other composer of

*Beethoven's exquisite works for stringed instruments show syncopation effects, but the hard, syncopated "accent" seems first evident as sharp contrasts, in the works of Schumann.

his time, connected economic stimuli with emotionalism, and the titles he gave his piano works, revealed his belief that Music could be made to express definite conceptions. Schumann not only felt the need of rhythmic works, but he also produced them, and the richness of his harmony is more pronounced in effect than Schubert's. Yet even Schumann did not sound the depths of German tragedy, because the social pressure was not yet charged with tragic stimuli. The century had not yet wrung the German heart. It was still submissive, although in fearful contemplation of its possibilities, nor had it as yet been aroused into active fury for national unity. Tragedy alone could fully move those much tried Teutonic depths. The interest manifested in Schumann's musical periodical "Die Neue Zeitschrift für Musik" proved that the growth of musical knowledge in public culture was keeping pace with the increasing complication of economic life, and with the growing intensity of its emotion-producing influences. As complicated as the forces which succeed in arousing national emotions, are the musical constructions which are contemporaneous with such forces. Mendelsohn reflected the reactionary feeling of one part of public thought, but he did not dominate in his field as did von Weber and Schumann. Bach and Händel influenced his work, and lent it the chief beauty evident in his many charming produc-

tions. His own life of ease and wealth prevented his being subjected to those harrowing experiences, so necessary to the soil of genius. For these reasons he cannot represent more than a certain phase of that whole social mind, which found its complete reflection in Schumann. During the period before 1849, it is significant that the waltz and the operetta should have begun their shallow but necessary existences in German life. Progress and prosperity had given a kind of careless capacity for enjoyment to the people, and a tendency toward unhealthy sluggishness of the national pulse. But we must notice that the public demanded the most pronounced rhythm as a means of imparting to the body an *excitation* of a higher degree of rhythmic motion. This was supplied perfectly in the waltz. Was this the first step backward to Grecian rhythmic exercises? The dance is as old as human life, but the waltz is peculiarly sensuous and suavely rhythmic, and its development by Johann Strauss came at an extraordinarily receptive moment in social desire. One must attempt to place one's own consciousness in the imaginary body of a person living in those times, in order to feel the need of the waltz. As our own time is near enough in stimuli similar to that period before 1848, the feat may not be impossible. The younger Strauss reflected most perfectly the restful period, which followed the unification of the Germans.

But Richard Wagner marks the highest point of German social pressure. This master did not defeat our thesis in the least degree, even in his early works, which were as conservative as any others of the times. Until 1842 his life was unsettled and his career doubtful. "Rienzi," given at Dresden in this year, proved a great success, and in 1843 his "Fliegende Hollender" showed the first positive adoption of *revolutionary ideas* in Music, although "Rienzi" contained some significant references to freedom and to the power of the people. Wagner certainly held the radical convictions of the time, and his later works were undoubtedly inspired by the stirring stimuli of then existing social pressure. In 1850 "Lohengrin" was produced with great success. Many trials tormented the spirit of Wagner until 1861, when his "Tannhäuser" was produced in Paris amid the howling of radical mobs, who literally forced it into failure. All this time his operas had been a part of Germany's operatic repertoire, but his greatest strokes in musical revolution were yet unfelt. Humiliation and poverty, malice and active enmity, assailed him at every point. Yet bravely defiant, *truly reflecting the German temper of that period,* he succeeded in gaining the patronage of King Ludwig II of Bavaria, and in 1865 "Tristan" was produced. This was a work which entirely *overturned the traditional structure of operatic ideals* and made

it possible for his enemies to deprive him of his hoped-for refuge in the King's favor. But in 1868 "Die Meistersänger" was performed at Munich. This work presented a genuine plea for *greater freedom* in art creations and exhibited a perfection of musical treatment, combined with *daring innovations,* which to this day constitute a lasting charm. After many misfortunes, but with a consciousness that his works had established German opera upon a new and ideal basis, Wagner realized his dreams in the production of "Der Ring des Nibelungen" in his own theatre at Bayreuth, in August, 1876. Note how close in time was Wagner's climax, in his activity of *revolutionary Music,* and the triumph of united Germany over the disdainful powers of Europe! At one and the same period (1876), we see Wagner established as the German emotional dictator, and German solidarity in Prussia's settled supremacy. At this time also, after a most distressing period of bloody warfare and mental torture, all Europe was at comparative peace. Does not our thesis hold good?

Now in the years of progress and peace from 1876 to 1882, what happens to the mind of Wagner, as we behold him finally freed from toil, poverty, enmity and humiliation? The same thing that happened to the social mind under the suave influence of constitutional government, headed by a wise and good king. Stimuli became softer, and the social

mind became more complicated in sense-perceptions, more sentimental, with a dramatic expression less colored by earthly strife and blood, more refined by spiritual and intellectual habits, and lo! in 1882 "Parsifal" marks the last production of the mighty Wagner. This work presents a decided falling back from the standards he had created in spontaneity and thematic development. The fact and the cause are plain. The cause of the "falling off" is to be found in the absence of deeply stirring economic stimuli, in the social pressure of the quiet years during which this work was in preparation. Let the historical facts speak for themselves. Assuredly the day will come, when sociologists and psychologists will recognize as a scientific phenomenon, and one admitting of quantitative psychiatric measurement, the relation between social nerve disturbance in emotion, and social tranquillization in Music, with its uncountable millions of vibrations which strike the nerves, and act in ways now seemingly mysterious, upon the life of a group.

With Wagner's death, attention descends the mount of achievement along emotional lines in Germany. Brahms, Strauss, Bruch, Bruchner and other recent composers, all cling to the robe of Wagner. Here and there these composers attempted alterations which distorted his idea, but succeeded only in picturing the milder intellectual stimuli which now ruled German thought.

CHAPTER VIII.

France (1800-1913).

France, as a most progressive nation, presents a splendid musical system and a correspondingly good product of musical culture. The French national mind is peculiarly sensitive to modern social pressure. Let this pressure be relieved by musical rhythm and France will bound ahead in musical paths as she has in so many other lines. In money expenditure, she stands high, but this expenditure is made largely in Paris. Culture in a State must be considered in its relation to all of its inhabitants, and while France shows a large absolute expenditure, her *per capita* expenditure is relatively low. This expenditure, however, is independent of private donations, which have no place in State control, and which are a detriment rather than a benefit to the general public, representing as they do, a control by the princely "fads" of a ruling class. National musical genius is expressed in the degree to which the national emotions are aroused by national stimuli. Had France reacted to her social pressure in the same manner as did Germany with practically the same stimuli, our history might have properly closed with Germany's triumph.

But France had received quite a different mental preparation from that which tortured the German heart in the 18th century, and the nature of French emotionalism was both far less sincerely tragic, and far more highly intellectual at every phase, than was Germany's. The common people of France were indeed subjected to genuine misery before the downfall of the monarchy, but they were ever arrayed in the glory of a conquering nation,—a leading power, conscious of its own supremacy in European affairs, although the peasantry were ground down with taxes, and made to be the overburdened supporters of a vicious royalty; yet the tone of the public mind, while somewhat critical, was chiefly domineering, and capable of great enthusiasm. Free thought was still in the freshness of youth, so that oppressions, as they came, were analyzed and denounced even while endured. Germany had never thought of doing this until 1848. The troubles of France were a direct consequence of the desires of the common people, and were not so much brought upon them by outside forces, as they were voluntarily encountered and even created, by themselves, in their conscious development of a new idea of popular rule. France wanted to do great and new deeds before she was mentally ready for such achievements, and her trials were of her own making. This fact does not lessen her emotional response to her

social pressure, but it does color it with a certain control even in its deepest action. Thus it was with France, Napoleon draining her soil of its best blood, but crowning the nation with laurels. The philosophical spirit aroused by the genius of Voltaire did not weaken even under this glory, and the French mind, although wearied by the revolution, rested only a moment in the re-actions under Napoleon. The reckless Republic was but the first sign of the new national temper, and—although all Europe united to subdue it, and Napoleon's Empire patted it into momentary quiet with an encouragement of all forms of progress—the national mind had tasted freedom and the old tolerance of royalty was dying. During the fourteen years of his reign, Napoleon gave substantial benefits to France. Continental Europe bent in submission at his feet. Although the French people hated the old idea of monarchy, they could not deny the advantages which France received from his powerful genius. His death in 1821 left his former subjects in a bad way, the people striving for constitutional government, against the allies in favor of absolutism. But little by little, certain advances were made by the people, in a gradual assertion of their opinions. Revolution was a constant menace in the social pressure of the half century following Napoleon's downfall.

The rebellious fanaticism underlying each and all

of civilized manifestations, is certain to strike new and staggering blows at the commercialism of our times. We feel as though terror and its causes in religion were lurking very near the surface of the world politics today.

Along many lines France has not lost her old ascendency in leadership, but her discipline has perhaps been too weak in the direction of dogged persistence. Her actions possibly have been governed at home and in her colonization efforts, by too much of a fatalistic policy, to give strong promise of any continuous establishment of power under the people's rule. Yet much is to be expected, from the daring courage, enthusiasm, and intellectual splendor of the French mind.

The whole country has furnished a strange contrast to German social reaction, for under the same stimuli the one wept while the other laughed. During the first forty years of the Nineteenth century, the piano virtuoso, with his superficial flourishes of finger technique reigned supreme over instrumental Music in France. The sonata, so representative of dignity and noble sentiment, was accorded only an obscure position during this superficial period, and the short piano piece took its place. On the other hand, performers gave stimulus to improvements in piano manufacture, as well as to composition of piano works. Liszt and Thalberg dazzled the Paris-

ians, and the public mind demanded no deeper expression of its emotional disturbance than that which was represented in pianistic display. After 1831 Chopin lived in Paris, and his works continued to express the French love of the dance, of ornamental display, and of delicate sentimentality. But in 1830 the romantic movement had made itself felt in Music under Berlioz, who produced a Music which suited perfectly the hot-headed revolutionary tendencies of this time. Orchestration attained a tone-color, a new technical possibility under Berlioz's manipulation, and the bizarre aspects of the then economic life were exactly reflected in his *revolutionary effects*. His book on instrumentation, published in 1844, became an authority, and he influenced musicians to attempt new forms, however these might be opposed to classical traditions. Berlioz desired to invent astonishing instrumental effects, and did so, but his efforts did not win him lasting popularity, although he is the real founder of modern French Music.

But it is in the field of grand opera that we must look for those amazingly accurate reflections of economic and social pressure, as evidenced in the Music of France during the nineteenth century. Cherubini contributed an earnest musicianship to French opera seria, but he exhibits strong influences of foreign models. Napoleon encouraged only the

most trivial of the Italian operas; his attitude was naturally disadvantageous to serious attempts in this field. Opera-comique began to exhibit dramatic color under Mehul but it remained for Spontini to reflect the Napoleonic regime, in opera which glorified the heroic in all its splendor. His French works "La Vestale" (1807), "Fernando Cortez" (1809), and "Olympie" (1819), reflect the mental attitude of the time, but true to this reflection, also show the lack of real depths of emotions not yet touched in France by the social pressure of the time. The opera-comique more truly represented public sentiment in the works of Boildieu, in "Le Calife de Bagdad," and "La Dame Blanche" which manifest a more serious tone and refinement than had as yet been known in this field. Auber, however, knew best how to call forth French admiration. His fame commenced about 1820, when ideals were beginning to be colored by a darker hue of seriousness, and his "Fra Diavolo" and "Le Domino Noir" exhibit his fine gift of characterization. Herold's "Zampa" presented new orchestral elements, and is still very popular in America and England. Grand opera of the heroic character received a strong impulse at the hands of Rossini, (who lived at Paris after 1824), in his French work "Guillaume Tell" (produced in 1829). Dramatic expression finds here some scope, although without any great depth, and

Auber's "La Muette de Portici" (1828), more nearly expresses the revolutionary feeling of the people, for the subject of the Music is *popular revolt against tyranny*. The works of Meyerbeer carry French grand opera to its highest point; his "Robert le Diable" (1831), and "Les Huguenots" (1836) fit into the expression of those years admirably, while his last work "L'Africaine" (1864), shows all of that ferment in French thought which was so inevitably leading up to the Franco-Prussian War of 1870.

The dramatic events of French Nineteenth century history had produced the genuine histrionic instinct in musical composiiton; and the complication of orchestral effects, was a natural expression of the multiplicity of stimuli accompanying every economic impulse. *Consistency* in Meyerbeer's Music was as conspicuous by its absence as it was in the French economic world, where the abnormal, sensational, religious and absurd were so inconsistently jumbled up with plans for a stable constitutional government, and peaceful relations with Europe. Simplicity was not to the taste of the time. Glaring colors and noisy effects much more nearly reflected the social mode, and Meyerbeer responded as the musician in him should have done, to the prevailing social pressure. The greatest development was exhibited in the orchestral dramatic expression, and the action

in a scene began to take a superior place above vocalization, in the formation of the Music drama. This departure may be said to mark the beginning of the degeneration of the real purpose of the opera.

With the reign of peace after the Franco-Prussian war, a new element entered the musical productions of the time. Orchestral concerts abounded. Church Music by Dubois, Gounod and Franck was of an excellent character, in line with the increasing agitation over religious questions. France needed rhythm, as a hungry man needs bread, and she found it in a partial return to Bach, and to the still earlier masters of sacred Music. Popular concerts were instituted for the benefit of the people in 1861. These have continued their useful mission to the present day. France has demanded that life shall be actually pictured in her Music. This impossible demand is leading French Music far from the relative characterizations as presented in Guonod's "Faust" and Bizet's "Carmen," and into the ridiculous "tonal tears" region, where a printed program is needed to inform the hearers, that the staccati of the piccolo are meant to indicate the rain drops on my lady's brow, and not intended to announce the squeal of a pig. Without the program, who would know?

Towards the close of the century, there is a decline in the sensuous and mystical elements, both in economic and in musical affairs. Gounod's "Faust"

in 1859 had reflected these qualities of the social mind, and his "St. Cecilia Mass" in 1856 expressed the religious attitude of the people. But the rise of the present Republic gave the sceptre into sterner hands, and the skillful use of Music in characterization was vividly expressed , in so far as it could be, in Bizet's "Carmen" in 1873. Saint Saens and Massenet show the intellectual refinement of the period now ushered in, with its strong suggestions of dramatic feeling so exquisitely expressed, yet clinging to ancient models in melodic construction, and avoiding the harsh and bizarre effects lately manifested in French tendencies. Cesár Franck, in his beautiful oratorio, "Les Beatitudes" (produced in 1891), demonstrates the real depth of religious sentiment existing under the intellectual adornments of the French mind at this period, and the great depth, and musical value of this work exhibit a fund of religious sentiment, which we do not believe has been crushed by the recent separation of Church and State, and which will show itself in revolt at no distant period.

The very latest operatic works of French composers are exhibiting a mad desire for an expression of a national Music, which looks more like an effort to root out the musical supremacy of Germany, than like a plan to establish a genuine progression in French art. France would like to have a Music all its own, be it ever so ugly, distorted, or bizarre.

She wants to lead in musical art, to tear up old models, to force a new-old scale upon her half distracted people, and to over-dress the misshapen things in absurd orchestral exaggeration, which so drowns the poor human voice, that the helpless vocal organ is obliged to shout dramatic phrases to a deafened audience, over the countless unrestrained vibrations of a hundred or more madly ringing instruments. What a farce it is! A grand opera presenting a modern girl of Paris, in a modern shirtwaist, yelling common-place remarks to the accompaniment of a monster band! But it must change. The human voice will come into its own again, when the over-excited modern mentality shall have calmed itself down to the normal. The orchestra will shrink to its diminutive and correct position, as a mere suggestor of the harmony which supports the voice, and the emotions of life will find their true relief in accentuated rhythm, soothing melody, and noble harmonies. France is still passing through, and she certainly will not come out of, her transition period with the thing she is now trying to call "Music."

French pride in musical accomplishment is well exhibited in the aid extended to this culture by State activity.*

*The statistics will be found in Appendix E.

CHAPTER IX.

United States.

It is a matter for surprise and deep regret that the United States Federal Government should show a lack of interest in musical education. But our young country is not likely to remain for long behind smaller lands. Our hope is secure in the fundamental generosity and wisdom of our national mind, which now squanders vast sums upon musical diversion, but spends nothing at all for the free musical education of its gifted citizens.

We have in this country a strange mixture of races and of ideals, all contributing something of Old World conditions, and combining to form a new type. The people who struggled so bravely through the Eighteenth and Nineteenth centuries were of various origins, but all came to the struggle with tragedy of some kind or other implanted in their mental composition. Emotions beat the pioneers into their one refuge, the Church; even the ballad, simple as it was, found but scant room where the prayer book lay. Pioneer life gave little ground for complication of stimuli, until the Nineteenth century opened the gates of our country to the in-

dustrial inventions, and to the discontent of foreign labor. A subdued and almost religious atmosphere stifled emotions during the first half of the Nineteenth century, but the waves of reform sweeping over Europe found their way even here by 1861, and the Great Civil War would have stirred us to our depths, had not the mighty currents of feeling within us been kept in subjection by our Church habits. The few valves of relief permitted to our people in the primitive vaudeville and theatre productions, were not sufficient to offset the irritation of quickly complicating economic stimuli. At this period our immigrant population came from England, Ireland, Scotland, Wales, Denmark, Belgium, Germany, Sweden, Norway and Switzerland. These immigrants generally possessed cool heads, and were of fine stern characters, skilled in various crafts, and they came to stay permanently. They became one with our people, and our struggles were their struggles. Italian opera and the higher intellectual diversions were later additions to the pleasures of the rich, but the masses rarely shared in such amusements; and the old-fashioned ballads, and the splendidly developed hymnal Music furnished our only relief for emotional disturbance. Yet this was endurable because of the beautiful hymnal exercise, until the gold-fever and the oil-madness, united with the agitaiton of the Southern States, set our emo-

tional depths to new movements, and the cry of the laborer for liberty and of the manufacturer for more power, added fear and rage to our every-day emotions. The rapid rise of our national power, the enormous strides in public education, and the incredible multiplication of stimuli upon every side, twisted and stretched our national nerves until we now see ourselves confronted with an abnormal type, which must soon find its normal calm in rhythmic pulse action, or else go to pieces under the strain. Nowhere have we any outlet or re-establishing agency, except in the dance, and in such cheap shows as permit of but a partial relief. The class of foreign labor arriving since 1883 is from the south of Europe, illiterate, fiery, adding another element of danger to our tense nationality, and still our blind government has not opened musical safety valves, for the steam that is fast rising to the bursting point. Our musical talent is of the finest order, but, not having any governmental aid in free instruction, is obliged to go to Europe, there to learn to compound a German, French or Italian medicine for an American disease, when our peculiar social pressure demands a particular American remedy. Private schools, having only their own financial gains in mind, are farcical agents for carrying out any truly social functions. The land cries out for its own musical culture, as strongly in rural districts as in

urban. Cannot the government see that musical employment in America is already covering a vast field? Scarcely any function is conducted without Music. Restaurants, hotels, clubs, opera houses, plays, churches, funerals, weddings, social events, parades, steamboat service, labor union meetings, support hundreds of thousands of professioanl musicians. Yet practically all of this employment is given to foreign-born talent, because only the well-to-do in America can study Music, and the common people who may possess the best talent, and who may both love it and need it the most, are denied this means of making a living, while municipal governments spend useless thousands upon concerts, and a few park bands which but whet the public appetite, while our rich musical talent among the poor lies dying and neglected.* No wonder revolution knocks at the door! The government is giving the eye-openers in its free educational plan, so aiding the disturbance of human rhythm by sensational newspapers, noisy streets, high prices and too quick life, yet closes the door to free musical instruction which would tranquillize the mind, and restore equilibrium of pulse. The churches nail down the natural im-

*The value of the musical instruction as given in public schools is not worth consideration beyond its diversion aspect. The singing is a menace to correct voice placement and the remaining exercises are insignificant.

pulses, and society frowns upon "new" forms, but nature will generate her energy nevertheless, and pent up in the human system it will boil over at a certain point.

The United States is by no means lacking in prosperity, sufficient for the maintenance of public musical instruction for the culture of a wage earning occupation. Our financial reports speak for themselves. In comparing our prosperity and our neglect of musical culture with the activities along this line as carried on by other countries, great and small, the following letter from ex-President Taft may be of interest:

The White House, July 3rd, 1909.
Washington.

My dear Sir:—

I have your letter and I do not think it possible to secure from the American government any appropriation for the promotion of musical schools. This must be done by private munificence if at all.

Sincerely yours,

WM. H. TAFT.

America is mad for Music. The moving-picture shows are saving our sanity with their rhythmic combinations of light and sound waves, their daily audiences amounting to 5,000,000 people in 14,000

picture theaters, and 4,000 subjects annually placed upon the American market.* By this means we retain our rhythm, but the higher remedies of the orchestral concert, opera and chamber Music performances are denied the people who have no wealth, while the hundreds of thousands of paying positions in the bodies which compose these forces, are likewise prohibited to our native talent, because there are no free schools in which such talent can be developed. Only the well-to-do may study Music in the United States and, strangely enough, our real talent often lies not in this class, but outside of this charmed circle, down among the elements of our foreign-born and the natives of foreign-born, whose ancestral nerves have been fed upon nationally provided musical rhythm.

United States gold should be showered over the health-giving and joy-bestowing field of National Music, so fondly loved by the people, and so necessary to mental and physical relaxation from the maddening strain of modern life. A bright star will adorn the administration of the first President to take this need in hand.

*American Industries, January, 1913.

APPENDIX A.

QUESTIONNAIRE.

The exact form of the American questionnaire employed in the gathering of statistics is given below. The inquiries sent abroad followed the same plan and had the same scope, but were couched in somewhat more indirect and formal terms, and of course each separate set of questions was sent out in the language of the country to whose officials it was directed.

For a statistical work I need some official information in regard to the following queries:

1. How much does the American Government expend annually upon public conservatories for free tuition of pupils?
2. How much do the single states contribute annually for the same purpose?
3. Is there any subvention for Grand Opera from the American Government or from the States?
4. Is there any subvention for Orchestra organizations, or for Choral Societies?
5. Are there any prizes granted annually from the State for musical achievements to composers, singers, players?

6. Are there any endowments from the American Government or from the States to enable young gifted musicians to complete their musical education in America or abroad?

APPENDIX B.

Sources of Statistical Material.

The sources of the statistics in this appendix are indicated in the first table below.

Gladly I take this opportunity again to express my appreciation of the invariable courtesies extended in answer to my inquiries. Elsewhere* will be found the names of the officials whose painstaking and often detailed reports made it possible for the author to convey to the reader a picture of the relative support given to music by the governments of foreign states.

Country	*Official or Institution Furnishing Statistics*	*Communication Dated*
Austria	Imperial Academy of Music and the Fine Arts.	Dec. 13, 1912
Bavaria	Minister of the Interior for Religion and Education.	Apr. 21, 1913
Belgium	Minister of Arts and Sciences	Feb. 4, 1913
Denmark	Danish Consul-General in New York.	May 8, 1913 May 13, 1913
Equador	Quito Conservatory of Music	Aug. 31, 1913
England	National Education Board, Whitehall, London, England.	Dec. 24, 1912
France	Paris Conservatoire	Feb. 9, 1913
Holland	Minister of the Interior	Mar. 19, 1913
Hungary	Secretary of State, Budapest	Mar. 23, 1913
Italy	Minister of Instruction	Mar. 10, 1913

*See pages 16-17.

Norway.....	Royal Inspector of Music in Christiania.	Dec. 15, 1912
Prussia.....	Consul-General of the United States in Berlin.	Mar. 10, 1913
Russia.....	First Secretary to the Russian Embassy, Washington, D.C.	May 28, 1913
Saxony.....	Minister of the Interior.....	Apr. 8, 1913
Sweden.....	Royal Conservatory of Music, Stockholm.	Jan. 4, 1913
United States.	Chief Clerk, United States Bureau of Education.	Mar. 15, 1913

APPENDIX C.

These figures are merely intended to give an idea of foreign activities in national annual support of musical culture. Comparisons, without more detailed statistics would be misleading and unjust. Therefore per capita calculations have been purposely omitted.

All Military Band expenses and appropriations have been deducted from the statistics received. Saxony and Bavaria as mere states, do not belong to above list, but the praiseworthy achievements of Bavaria are shown in her total expenditures of 703,030 Marks annually.

Countries	*Population**	*Square Miles*	*Foreign Money*	*American Dollars*
Austria	28,568,000	115,903	1,730,084 Kronen	351,207
Belgium	7,317,561	11,373	641,275 Francs	123,766
Denmark	2,775,000	15,582	20,600 Kronen	5,520
Equador (1913) ..	1,400,000	116,000	28,500 Sucre	13,879
France	39,252,000	207,054	1,971,118 Francs	380,425
Great Britain	45,947,000	121,510	4,600 Lbs	22,385
Holland	5,858,000	12,648	32,000 Florins	12,864
Hungary	20,851,000	125,430	1,126,033 Kronen	228,584
Italy	34,565,000	110,659	851,340 Lire	164,308
Norway	2,393,000	124,130	15,700 Kronen	4,207
Russia	142,585,000	2,217,929	139,900 Roubles	72,048
Sweden	5,476,000	172,876	313,017 Kronen	83,888

**Scientific American* of 1913.

APPENDIX D.

NOTES ON TABULATION.

The foregoing tabulation may be considered fairly representative, because the relative resources of each country, and the relative cost of sustaining musical institutions tend to equalize the sum of their actual benefits to the people. Bavarian and Austrian institutions charge small rates for instruction to native talent, but much larger sums to strangers. France and Belgium charge merely entrance fees to natives, but strangers pay a comfortable sum, and must pass a difficult examination. The letter from the celebrated violinist and teacher, Ovid Musin, given in Appendix E, shows that there are two classes of students, native students who pay a very small fee, and foreign paying students. The letter was a reply to our inquiry as to tuition fees charged by French and Belgian musical conservatories under governmental control. Italy also charges a small yearly sum for instruction of natives, but all of her institutions teach exceptional talent free of charge, if inability to pay on the part of the applicant be proved.

Italy's distribution of her culture in Milan, Naples, Palermo, Parma, Florence and Rome, pre-

sents an area most creditable to her governmental care of Music. Considering Italy's position in the commercial world, her figures represent a high proportion of attention to musical needs. This we would naturally expect of that grand old Mediterranean race, which has never failed in all of its wondrous history, to uphold its loftiest ideals despite its calamities. Her musical genius has always found national protection. Italy has thus shown her wisdom.

The density of France's population brings down her *per capita* expenditure.

The difference in the charges to native students may depend upon the varying cost of support in different countries. For instance in Vienna, $40.00 per year is one charge, while at Brussells the charge to natives is but $1.00 per year.

Even were free tuition not given, the governmental institutions charging for instruction would still be great aids to the advancement of musical culture in their respective states, as the small sums charged are within the reach of those who can have their days free for study. How far would $40.00 go in musical education in the United States? In America, vocal and piano teachers charge from $2 to $5 per lesson, to maintain their position among so-called first class teachers. Car fares, Music, instruments, clothes, tickets for concerts, operas, etc., would exhaust $40.00 in a month; and while an

ambitious brick-layer could easily pay $40.00 per year, for his child's musical education in a governmentally supported college, $40.00 per month would represent the full wages of two of his girls, working all day long in a department store. "Free Schools of Music" would not be nearly so successful as "National Schools of Music," because our people do not like anything which tends to divide those who can pay, from those who cannot. The wise among our well-to-do American parents now send their children to our public schools, in preference to private academies, knowing well the superior advantages thus gained. When it becomes known that National Schools of Music are on a par with State universities, offering the world's best instruction and the very best advantages, then graduation from such institutions will be a matter of pride to anyone, rich or poor.

The Question of Fees.

As we have said, the small sums required as entrance or tuition fees by some of the musical institutions under governmental support, do not detract from the value of such institutions; but it would scarcely be just to place all of the conservatories so conditioned, upon a par of public spiritedness with those which take no fees whatsoever for tuition of native pupils, unless some superiority of educational advantages in the former tend to equalize their bene-

fits. It is impracticable to judge of the merits of each institution, and such a critical examination is not the purpose of this work; but mention of the systems employed by a few countries showing special care of national musical culture, may not be out of place here. Belgium has produced much of the world's genius, giving us from her conservatory at Liege alone, such splendid artists as Martin Marsick, Ovid Musin, Ysaye, Cesar Thomson and Remy. Liege charges no fees to native talent. In his reply* to our request for information concerning fees in the French, Belgian and Holland conservatories, Ovid Musin attributes the marked artistic results of the Belgium conservatories to the fact that the remuneration of the professors is such as to enable them to devote their entire time to their conservatory pupils; foreigners pay 200 francs a year, but native students receive free tuition.

In response to a similar request concerning fees in Italian governmental schools of Music, Signor Gatti-Casazza, director of the Metropolitan Opera House of New York, replied that there were both free and paying pupils.

The question of fees in all government schools of Music, would involve an exhaustive research into the ideals behind the founding of each such school, and

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*The communication will be found in Appendix E.

into the resources upon which their maintenance depends. Undoubtedly, the highest ideal in such undertakings is that which animates the Belgian system, and insures its wonderful success. A close study of Belgium's management of her conservatories would be surely illuminating and inspiring to our own country. This little country is to be congratulated, as the holder of the musical laurels of both the past and the present in national support of native talent. Her efforts are signs of the live musical genius of Belgium, and show great state care of musical culture. Belgium has always been a leader in musical culture, and the world owes her a debt of gratitude for her products of genius, only to be fully appreciated when the present abnormal stage shall have passed, and the saner musical school be once more established.

America owes much of her rarest pleasure to the varied genius presented in Russian Music. May the lesson of Russia's governmental care for her subjects' need of Music not be lost, in the prosperity of our too commercialized United States of America.

Were it not for the excellent total of the Bavarian expenditures for public education in Music, Germany as a whole would present a very poor figure, for Saxony stands low, and the Prussian statistics were "unavailable."* Saxony, with the wonderful musical output, which so delights the musical world is evi-

*See page 127.

dently in the hands of private business, in which governmental protection and state cultivation of Saxon talent as yet play but a small role. This is surprising, considering the examples around Saxony, but her resources and history must be taken into account in the judgment of her generosity.

Norway's population is scarcely equal in number to that of one of our medium sized American cities; hence her figures represent a true love and care for Music, and the products of her musical genius fully justify the support accorded. She holds her own in musical protection.

Denmark has enriched our American life with the strong free blood of the North, and her Music, with its sweet sadness, has left its impress upon American musical culture.

The Music-loving, and Music-needing Austrians will find the reason of their care of national rhythm in the sorrows of their history, for no other countries have suffered from the double tyranny of war and religion as have Austria and Hungary, whose emotions have been the harp upon which other powers have played continuously. Austria's position has not seemed sufficiently stable in history to include it as a leading power separate from German influence, and though it is so closely allied to Italy in temperament, its language and customs are German and its recent history is closely analogous to that of Germany. Yet

Austria's government is devoted to the musical interests of its gifted subjects. This musical race has produced some of the noblest talent, for her past sorrows and responsive temperament *needed* Music in a marked degree. Austria, standing so high among the large states in musical culture, is to be congratulated for her brilliant example. Austria's figures as they stand, and without taking into consideration the size of her population, would have placed her in the lead.

Swedish musical talent had taught us to expect much from Sweden, and we are justified in this faith. The showing made by Sweden in a graph of State care of musical culture, will find its cause likewise in its history, for Sweden's emotions have not been left to harden for lack of use, and her acute sufferings have been manifested in a fineness of musical talent, and in a love for the noble in Music, equal to the progressiveness of her national mind. In comparative peace for 90 years, soothed by her "rhythm-giving" Music, who shall determine the result of that noble tranquillity, which has been aided by her parental care of the musical needs of her people? Sweden sets a splendid example for the United States, since despite a comparative lack of wealth, cold climate and seeming cheerlessness of environment, she nevertheless nourishes the lovely flower of national Music. This shows a progressiveness and care doubly com-

mendable, when one considers in addition to the above mentioned fact, the smallness of both her population and her resources as compared with other countries.

The work of the Conservatory of Quito, Republic of Equador, deserves high praise for the completeness of its outfit and evident success. It is refreshing indeed to feel that Music holds so large a share of public attention in this brave little Republic of the south. The study of her musical statistics in Appendix C suggests very strongly that the Latin races may have found in their Music, an antidote for the chilling commercialism of modern civilization.

Holland, from whom we expected little in governmental support of Music, presents a very good standing. We Americans, who are proud that Dutch blood flows in our veins, could not do better than to take this small nation as an example in national duty. She shows a praise-worthy care for national musical culture. It is with pride in the showing made by this distinguished little state that we call attention to her national culture of music.

Hungary deserves high praise for the care of her musical talent as represented in her statistics. Hungarian composition has ever possessed a special charm for Americans. Much may be expected of a nation which so cares for the musical need of its humblest members as to support a symphony orchestra for the

purpose of giving concerts for young workmen in provincial towns, and for the propagation of artistic music and culture.

APPENDIX E.

COMMUNICATIONS.

These letters are presented in condensed form for convenience.

January 2, 1914.

Tuition for strangers in European conservatories is two hundred francs. Entrance is dependent upon the proved musical ability, before an examination committee, of the student to do serious work, since the number of students in each class is limited to ten. Native students pay only five francs.

OVID MUSIN.

"The French and Belgian National and Royal Conservatories are not only supported, but were founded and are managed by their governments under their National and Royal Commissioners for the cultivation of the Art of Music, *for the Art's sake.* Instruction is without cost to natives, but foreigners are taxed two hundred francs per year. This money goes to the government, not to the professors. .....The only conservatory in France which is supported by the government is the "Conservatoire na-

tional" of Paris. The Royal conservatories of Holland and Belgium are unique, and entirely different in scheme from those in any other country.....The difference between the government music schools of France and Belgium lies in the fact that the remuneration of the Director, professors and other officers is sufficient in the case of Belgium to enable these 'functionaries' of the government to devote their time exclusively to their office. In fact, the professors are on the same plane as those of the Universities, whereas in France the remuneration is quite small, and the professors of this National Conservatory do not rely upon their salaries in order to live, as in Belgium, and for that reason the artistic results of the Paris Conservatory cannot be compared to the conservatories of Belgium."

MRS. OVID MUSIN.

"I believe that at the Conservatory of Milan there are two classes of pupils. One is admitted to the courses in a fixed number, free of charge, the other by payment."

GATTI-CASAZZA,
Director of the Metropolitan Opera House of New York.

AUSTRIA.

Vienna, December 13, 1912.

Enclosed please find the governmental report and statistics for 1913 showing Austria's appropriation for music.

WILLIAM BOPP,

Director of the Imperial and Royal Academy of Music and Plastic Arts.

	Crowns
State Conservatories, annually	699,026
Subventions to private musical schools	332,208
Subventions to orchestra, chorus, and other musical societies	135,850
Prizes for Composers	7,000
For other musicians	17,000
State competitions for composers	3,000
Other expenses for music	114,000
Music Instruction in Public Schools	302,000
Singing Instruction in the Public Schools	120,000
Extraordinary expenses in the years 1911-1913 for the new building of the Royal and Imperial Academy of Music	2,000,000
Total	3,730,084

BAVARIA.

Munich, April 21st, 1913.

ROYAL MINISTER OF STATE,
INTERIOR AND
EDUCATION IN BAVARIA.

Concerning Music Expenditures in Bavaria.

In Bavaria there are two Music Institutions which are directed and supported by the State. So far their income is not sufficient to cover expenses. These institutions are the Royal Academy of Music in Munich and the Royal Conservatory of Music in Wuerzburg.

The contribution of the State for the year's budgets 1912-1913 is, yearly:

	Marks
For the Royal Academy of Music in Munich.....	67,370
For the Royal Conservatory in Wuerzburg	72,660

The expenditures for Music Instruction in Schools of the State are yearly:

For the Humanistic Gymnasiums and Real Gymnasiums	157,000
For the Progymnasiums, Latin Schools, High Real Schools and Real Schools	120,000
For the Teacher Institutes (for both sexes).....	286,000
	703,030

The State does not contribute any sum for expenditures in the Royal Theatres in Munich.

Also there is no endowment from the state for scholarships. There are special private endowments for this purpose.

STEINER.

BELGIUM.

Brussells, February 4th, 1913.

MINISTRY OF ARTS AND SCIENCES.

FINE ARTS OFFICE. SECTION No. 31042.

The four Conservatories are State Institutions and the funds are contributed from the State, the Province and the cities.

The subvention from the State is as follows:

	Francs
Conservatorium in Bruxelles	190,500
" " Liege	104,835
" " Gand	66,750
" " Anvers	65,190
Annual subvention for Music schools	130,000
Annual subvention for symphonic and choral organizations	28,800
Subventions to gifted composers, singers, players subject to change) last year	20,000
(Concours de Rome) Annual scholarship award	4,000
Bureau of Studies	14,200
Subvention to composers who represent their Opera in a Belgium Theatre, annually	6,000
Subvention for the publication of old Belgian composers, annually	11,000
Total of annual State subvention	641,275

M. PHILLIS.

DENMARK.

CONSULATE OF DENMARK.

8-10 Bridge St.

JNR. A.F. & I. 9/13.

New York, May 8, 1913.*

My Dear Sir:—

In further reference to your letter of March 19, I beg to inform you that the sum of 10,000 Kroner has been granted to the Royal Music Conservatory and of 1,000 Kroner to the so-called "Palace Concerts," besides this, various small amounts have been given to singers and musicians to enable them to gain further experience abroad.

Hoping that this information will be of asistance, I am,

Yours very truly,

J. CLAN,

Consul-General.

*Another letter dated May 13, 1913, adds "9,600 Kroner to the different concert associations," bringing Denmark's annual expenditure for musical education up to a total of 20,600 Kroner.

ENGLAND.

Telegrammes:—
Renseigne, London.

BOARD OF EDUCATION.

WHITEHALL, LONDON, S. W.
December 24th, 1912.

No part of the grant paid by the Board of Education to schools, or other educational institutions where music is taught is ear-marked for the instruction of music.

An annual grant of £500 each is made by the State to the Royal Academy of Music and the Royal College of Music. A similar grant of £300 per annum is made to the Royal Irish Academy of Music.

The Army Estimates for the financial year 1912-1913 include sums of £21,700 in aid of band expenses in the Regular Army and £3,300 in aid of the Army School of Music. Singing and music are taught in some establishments for military education, but the expenditures in these subjects can not be separated from the rest of the expenditures.

There is no State subvention of opera.

Yours faithfully,

A. W. TWENLYMAN.

This presents English musical expenditures as follows:

Annual Grants by State to:—

	Pounds
Royal Academy of Music	500
Royal College of Music	500
Irish Academy of Music	300
Army Band expenses in Regular Army	21,700
Schools of Music	3,300
Total	26,300

EQUADOR.

August 31st, 1913.

The National Conservatory of Music was founded April 26th, 1900, by Executive-Judicial Decree.

Initial Government Subventions.

1900	*Sucres*
Installation Funds	2,000.00
Salaries	12,000.00
Musical Instruments and Music	3,510.30
1903-5.	
Musical Instruments and Music	35,000.00
Maintenance	58,780.00

Annual Government Subventions since 1905.

	Sucres
1906	23,000
1907	23,000
1908	22,000
1909	25,380
1910	27,540
1911	31,500
1912	28,500
1913	28,500

The first year's class, 1900, numbered ninety-three men and thirty-one women. The class of 1913, included two hundred and twenty-six men and two hundred and thirteen women.

THE DIRECTORS,
National Conservatory of Music,
Quito, Equador.

FRANCE.

February 9, 1913.

Here are all the official statistics—obtained this very morning.

I. PHILIPP,

Professor, Paris Conservatory.

	Francs
Music Inspectors, annually	14,200
Travelling expenses	3,000
French Academy in Rome, one-fifth of total	29,195
National Conservatory: Professors	197,300
Material	41,350
Indemnities	41,223
Branch Institutes	156,500
National Theatres, Subventions	1,225,000
Music Library of the Opera House	6,000
Popular Concerts	133,500
Subventions to Musical Societies	7,100
Palace of the Trocadero, for the Music Hall	13,000
Subventions to musicians	103,750
Total annually	1,971,118

HOLLAND.

MINISTRY OF THE INTERIOR, No. 733.

Afdeeling K. W. Ministerie Van
Binnenlandsche Zaken Gravenhage,

March 19, 1913.

	Florins
1. Subsidizing of Conservatories	27,000
2. Subsidies for poor, young, gifted musicians of both sexes, as help in their studies	5,000
3. For military bands	186,000

TH. HEEMSKERK,

Minister of the Interior and
Secretary-General of Holland.

NORWAY.

Christiania, Dec. 15, 1912.

Our theatres have no governmental subsidy. Music in the public schools is a local not a federal matter.

We have no conservatories of the usual European type but there are smaller music schools and schools for organists which are in part subventioned by the State.

What the State spends for purposes of music can be described as follows:

	Crowns
Military Music annually	160,000
Subvention to composers	5,200
Subvention to other musicians	6,000
Music schools	4,500
Total, annually	175,700

Most respectfully,

OLE OLESON,
Army Inspector of Music.

ITALY.

Rome, February 14, 1913.

MINISTRY OF INSTRUCTION.

GENERAL OFFICE
OF THE DIRECTOR
OF ANTIQUITIES & FINE ARTS.

Posiz. 21 aff. gen.
N. di.

PROT. 339. SUBJECT: STATISTICAL INQUIRY.

The Italian Government appropriates 440,500 Lire for professional salaries and 146,400 Lire for administration expenses in connection with the five national conservatories of music among which the former amount is apportioned as follows:

	Lire
Milan Conservatory of Music	102,000
Naples " " "	107,000
Palermo " " "	80,000
Parma " " "	71,500
Florence Musical Institute	80,000

There is an additional appropriation approximately 30,000 Lire for extraordinary or temporary compensation to the personnel of these various schools.

Instruments, etc.	131,440
Annual Government Subvention to the City Conservatory of Music at Rome	101,000
Annual subvention to pupils	2,000

(LUIGI) CREDARO,
Minister of Public Instruction.

PRUSSIA.

AMERICAN CONSULATE GENERAL,
BERLIN, GERMANY.

March 10, 1913.

I acknowledge receipt of your letter of February 9, 1913, relative to expenditures of the Prussian Government for the benefit of musical art.

I am informed by the Prussian Statistical Bureau that no definite figures are available as to expenditures in this branch of education. The Prussian Minister of Education has also been unable to inform me of the amount utilized in this particular branch. He adds that the amount so expended varies from year to year.

Aside from the Prussian Government various municipalities within the Kingdom occasionally make money grants for the encouragement of musical students. Last year, for example, the City of Berlin voted Marks 60,000 ($14,280.) in order that the Philharmonic Orchestra might be retained in the city during the summer months instead of visiting sea shore and other resorts. In consideration of this subsidy, the orchestra played popular concerts at certain large halls at a nominal rate of admission.

The German Emperor in his private capacity is a liberal contributor to musical art. He makes money grants annually for the support of the Royal Opera in Berlin, the amount varying with each year's needs. The amount of this contribution is not made public.

The foregoing is the most definite information obtainable on this subject. I hope it may be of some service to you.

Very respectfully yours,

M. THACKARA,
American Consul General.

HUNGARY.

The following list of governmental institutions for musical culture in Hungary were kindly submitted by Dr. Paul Majouszky, Chief of the Fine-Art Section, and Naray-Szabó, State Secretary.

	Crowns
The Musical Academy of Budapest receives a yearly sum of (from Budget of 1913)	385,233
School Fees amount to	54,440
Yearly subventions to Music Schools maintained by provincial towns and associations	56,000
Assistance to musicians, especially to composers for studies in foreign countries and for publishing musical compositions	8,000
For general musical aims, orchestras, concert subventions of musical works	122,000
For maintenance of Philharmonic Society formed by members of the Royal Hungarian Opera, and the Symphonic Orchestra founded by the State in order to give concerts for the young workmen in provincial towns	120,000
For the maintenance of the Royal Opera Orchestra and the payment of its Director	343,500
For the Choral Society of the Budapest Royal Hungarian University	700
For the Choral Society of the Joseph Polytechnical High School	1,000
And for its Orchestra	1,500
Toward salaries of Music Teachers in schools....	88,100
For Military Music Bands	76,000
	1,202,033

RUSSIA.

IMPERIAL RUSSIAN EMBASSY.

WASHINGTON, D. C.

Washington, May 28, 1913.
No. 193.

The exact sum spent annually in subventions to music by the Imperial Ministry of the Interior is 139,900 Roubles per annum.

ALEXANDER LYSSAKOVSKY.
First Secretary of the Embassy.

SAXONY.

Dresden, April 8th, 1913.

Königlich-Sächsisches
Ministerium des Innern.

No. 627 III. F.

There are no State Conservatories or State Schools for musical education in Saxony.

The institutions for musical education under control of the ministerial department are various private undertakings.

For artistic development in music the undersigned Ministry allows 5,000 marks a year. This support is for part or whole tuition for unusually gifted and studious men and women students who belong in Saxony.

(Graf) VITZTHUM VON ECKSTAEDT,
Royal Minister of the Interior, Saxony.

SWEDEN.

Royal Conservatory of Music.

Stockholm, January 4th, 1913.

The yearly subventions of the Swedish Government for music according to the latest available sources:

	Crowns
Annual subvention from the State for the Royal Academy of Music and the Royal Conservatory	85,649.67
Subvention to the Royal Opera House	60,000.00
Subventions to Swedish Composers	15,000.00
Musical Instruction in public schools	124,367.50
Military orchestras	1,027,424.10
Two orchestras	28,000.00
Total of annual subvention	1,340,441.27

Br. Beckman.

UNITED STATES.

DEPARTMENT OF THE INTERIOR,

BUREAU OF EDUCATION,

Washington, D. C., March 5, 1913.

1. The American government does not make any appropriation whatsoever for the instruction of pupils in public conservatories.

2. So far as known to this office, none of the states contribute sums for the same purpose.

3. The American government does not make any subvention for grand opera. In so far as this Bureau has been able to obtain information, no such subvention is made by any state.

4. So far as known to this Bureau, there is no subvention for orchestra organizations or choral societies.

5. So far as known to this Bureau there are no prizes granted by the State for musical achievements to composers, singers or players.

6. There is no endowment by the federal government to enable young gifted musicians to complete their musical education in America or abroad.

I may say that instruction in music is given in some of the Indian schools maintained by the federal

government and such schools also have musical organizations. No specific appropriation for instruction in music, however, is made by the federal government. This statement applies also to state-aided institutions.

Respectfully,

T. A. KALBACH,
Chief Clerk.

HUNGARY.

ROYAL HUNGARIAN MINISTRY
OF PUBLIC WORSHIP AND EDUCATION
BUDAPEST
N. 13577

TRANSLATION.

I have the honour to give you the information you asked in your letter from the 11th January, 1913. There is only one musical school, a high-school, of the state in Hungary: the Music Academy in Budapest. The budget of the present year provides the sum of 385.233 crowns for the maintenance of that institute. After deducting the school fees of 54.440 cr. the state has to spend yearly 333.-793 cr. The state gives also to the music schools maintained by provincial towns and associations a yearly subvention of 56.000 cr. that is increasing from year to year. To the purpose of assisting musicians, especially composers to make studies in foreign countries, and of publishing musical compositions and a collection of popular songs, the budget provides 8,000 cr. For general musical aims, (orchestras, concerts, subventions of musical works, etc.) 122.000 cr. are destined, specially 120.000 cr. to the maintenance of the philharmonic society formed by members of the Royal Hung. Opera and

the Symphony Orchestra founded by the state in order to give concerts for the young workmen, etc. in provincial towns and to the propagation of artistic music and culture. The maintenance of the Royal Opera Orchestra and the payment of its dirigent require 343.500 cr. The capital Budapest maintains a course of music, and number of provincial towns maintain music schools and orchestras without any assistance of the state. As for the costs of military bands I shall have the honour to give you subsequently the necessary information.

Budapest, the 23d March 1913.

For the minister:

(Signed) NARAY-SZABO,
State Secretary.

ROYAL HUNGARIAN MINISTRY
OF PUBLIC WORSHIP AND EDUCATION
BUDAPEST
N. 124655

I have the honour to give you the supplementary information I promised, when answering (N. 13577, 12th April) your letter from the 11th January. The Hungarian State at present gives an annual subsidy of 700 crowns to the choral society of Budapest Royal Hungarian University, 1000 crowns to the

choral society and 1500 to the orchestra of the Joseph Olytechnical High School. In the middle schools (Colleges and Real Schools) the musical teaching is not yet perfectly organized, the fees for the courses are paid by the pupils, the state contributes to the salaries of music teachers. The annual costs of the said teaching amount (including a salary of 6400 cr. for the inspector) in girl schools to 74,500, in medico-pedagogical institutes to 13,600 cr., those for the maintenance of military music-bands in the regular army 76,400 crowns.

Budapest, the 24th July, 1913.

By order of the Minister,

(Signed) DR. PAUL MAJOWZKY,

Chief of the Fine-Art Section.

APPENDIX F.

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VITA.

The writer was graduated from New York University in 1900 with the degree of Bachelor of Laws. She entered Columbia University in 1907 where she received the degrees of Bachelor of Music in 1910, and of Master of Arts in 1911.

She is the author of "The Advanced School of Vocal Art," and of various operatic libretti, and the translator of numerous published poems from the French, German, Italian and Spanish.

During 1902-1904, she was a contributor from Russia to "The Brooklyn Daily Eagle," and, in 1912, to various periodicals. During 1904-1913, she was one of the four directors of The Powell and Pirani Musical Institute of Brooklyn, New York.

In 1909, she was one of the incorporators of "The Public Good Society of New York City," and was elected its president, which position she still holds.

In 1912 she was elected honorary member of the American Philharmonic Society.

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